



# SMITHSONIAN INSTITUTION WAR BACKGROUND STUDIES NUMBER ELEVEN

# EGYPT AND THE SUEZ CANAL

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# **CONTENTS**

CONTENTS	Page
Modern Egypt	
The country	. 1
The people	. 7
Games and amusements	. 11
Education and social welfare	. 13
Agriculture and industrial activity	
The government	. 18
Ancient Egypt	
Predynastic Egypt	
The Protodynastic epoch	
The Dynastic period	
The Old Kingdom	
The Middle Kingdom	
The Hyksos or Shepherd Kings	32
The New Empire	
First period of the Empire	33
Second period of the Empire	39
The Libyan dynasty	
The Ethiopian dynasty	
The Assyrian conquest	
Restoration of Egyptian rule	48
The Persians	
Alexander the Great and the Ptolemies	
The Roman period	
4	
The Mamelukes	
Mohammed Ali	
Foreign intervention in Egypt	
The Suez Canal	
Selected bibliography	. 67
ILLUSTRATIONS	
DI ACTEC	
PLATES	Page
1. The pyramids at Gizeh	. 1
2. 1, Street in old quarter of Cairo	
2, Street in modern section of Cairo	. 4
3. 1, Portion of Cairo from the Citadel	. 4
2, Mosques and another portion of Cairo as seen from the Citadel	
4. 1, The Mosque of Mohammed Ali	
2, Modern apartment buildings in Cairo	
5. 1, Street in the bazaar at Cairo	
2, The "baker's boy" delivering the morning bread	
	_

# ILLUSTRATIONS

	·	Page
6.	1, The Sahara	16
	2, Ox turning wheel to lift water for irrigation	16
7.	1, Sailboat on the Nile	16
	2, Nile steamboat in Upper Egypt	16
8.	1, Mud-walled village in Upper Egypt	16
	2, Patriarch of Armant	16
9.	View across the roof tops of a native village in Upper Egypt	16
10.	1, Native laborers	24
	2, Tomb of a "Pilgrim," Upper Egypt	24
11.	1, Terraced or stepped pyramid of Zoser at Sakkara	24
	2, Ruins of a chapel at Sakkara	24
12.	1, Excavating crew at Sakkara	24
	2, Workmen around the Great Sphinx at Gizeh	24
13.	Nofret, woman of the fourth dynasty	24
14.	Queen Hatshepsut of the eighteenth dynasty	32
15.	Heads of four Pharaohs	32
16.	Temple to the Rising Sun at Abu-Simbel	32
17.	Portion of the Ramesseum, mortuary temple of Rameses II, at Thebes	32
18.	1, Portion of the temple at Karnak	44
	2, Remains of Amenhotep III's temple at Luxor	44
19.	1, Doorway into colonnade of temple at Karnak	44
	2, Detail of pillar in temple at Karnak	44
20.	Isis, the Moon Goddess, and Amon, the God of Thebes	44
21.	Coffins of the twenty-first dynasty	44
22.	Pylon of the Temple of Isis at Philae	60
23.	Pylon of the Temple of Horus at Edfu	60
24.	1, Carvings on wall in the Temple of Khonsu at Karnak	60
	2, Portion of the pylon of the Temple of Hathor at Dendra	60
25.	Propylon or gate of Euergetes I, Ptolemy III, at Karnak	60
	TEXT FIGURE	D
1.	Map of Egypt	Page
	1 0,1	-





# EGYPT AND THE SUEZ CANAL

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(WITH 25 PLATES)

#### MODERN EGYPT

The focusing of attention on Egypt by Axis drives across northern Africa toward Alexandria, Suez, and the canal so aptly termed "the jugular vein of the British Empire," and General Montgomery's successful routing of Rommel's panzers recalls the fact that in its thousands of years of history the Land of the Pharaohs has often echoed to the tread of martial feet. One of the three oldest centers of true civilization, it has played a significant part in the schemes of many men and nations. Current writers in discussing its military and psychological importance in the present conflict stress its status as the key to the Mediterranean, as the rampart that guards the Middle East and the overland route to India, and as the vital crossroads between continents where the East meets the West. There is no denying its strategic value in today's trend of events, but in other times and by other men, for divers and sundry reasons, it has been considered as of equal moment and well worth the effort to gain or hold. Whether conqueror or conquered, friendly rival or ally, Egypt from the dawn of history left a strong imprint on the cultural and economic growth of man.

### THE COUNTRY

Lying at the northeastern corner of Africa, this country of startling contrasts comprises some 386,000 square miles of territory of which only about one-fifteenth is not desert. Its northern boundary is the Mediterranean Sea where over 600 miles of coast line offer few good harbors. On the east lie Palestine and the Red Sea with its 1,200 miles of mountainous coast. At the south is the vast desert tableland of the Anglo-Egyptian Sudan, and on the west the Great Sahara or Libyan Desert. Egypt proper, for all practical purposes, is the long, narrow corridor of

# PLATE 1

The pyramids at Gizeh. Pyramid of Menkure or Mycerinus on left, Kahfre or Chephren in center, Khufu or Cheops on right.

fertile and hospitable land comprising the valley and the delta of the Nile. The valley, known as Upper Egypt, extends some 600 miles from the apex of the delta to the first cataract. It is bordered by tawny-colored bluffs, ranging from a few hundred to almost 1,000 feet in height, above and beyond which lie the arid plateaus of the Libyan and Arabian deserts. The floor of the valley varies from a few to 30 miles in width, and in its bottom are black, alluvial deposits 30 to 40 feet in depth through which the river winds its northward way. In the lower third of the valley a minor channel, called the Bahr Yusof, separates from the main stream and follows the base of the western bluffs until it breaks through into the Fayum, a great depression in the Libyan Desert where famed Lake Moeris was located and its present small remnant called Birket el-Kurun is situated. About 100 miles from the sea the valley walls curve out toward the east and the west, and the Nile enters the broad triangle of the Delta. Near its apex the stream separates into two branches that make their sluggish way to the Mediterranean. In earlier times there were seven such streams. Large portions of five of them are incorporated in the network of canals between the remaining two. The Delta, originally a prehistoric bay, was gradually built up by deposits from the river. These deposits are very deep, from 55 to 70 feet, and form the fertile plain that terminates in a chain of great lakes, lagoons, marshes, and low sand hills along the northern coast. The Delta constitutes the region called Lower Egypt.

West of the apex of the Delta and north of the Fayum are a number of lakes in the bed of the Wadi Natron, and farther south in the escarpment of the plateau are the depressions and indentations that contain the five large oases of Egypt, fertile spots watered by springs and wells that probably owe their existence to infiltration from the Nile. With these exceptions, perhaps of greater importance in the past than they are today, the western desert is a forbidding and sterile wasteland. The eastern or Arabian desert, however, is somewhat more favorable and yields a scanty subsistence for numerous small tribes of nomads.

Egypt is practically rainless outside of the northern half of the Delta. In Upper Egypt showers occur at irregular intervals, frequently several years apart, and are even more intermittent in the open desert. It is only in a narrow belt along the Mediterranean that there is regular precipitation and that comes during the winter months. On rare occasions an early morning fog, cold and dense, rises from the Nile, but it is soon dissipated by breezes and the rising sun. Snow falls from time to time in the higher levels of the Red Sea hills and the mountains of Sinai,

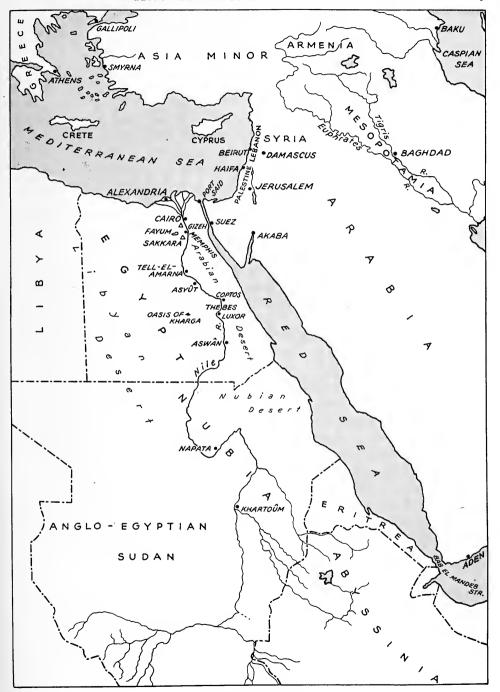


Fig. 1.—Map of Egypt.

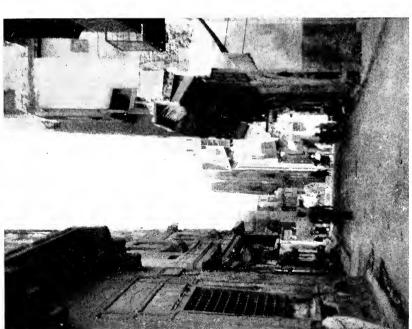
although it is unknown in the valley of the Nile. The days are hot and cloudless, but the nights, even in summer, are cool, and during the winter months the hour before dawn is actually cold. The climate would be very disagreeable were it not for a persistent northerly wind that serves to keep temperatures within reasonable bounds. South and west winds occur during the winter months at the lower end of the valley, in the vicinity of Cairo, while farther up the river they come in from the west. Throughout the remainder of the year the blow is generally from the north. At the first cataract at Aswân it is almost continually from that direction. In the spring hot 2- and 3-day winds called the khamsin swirl in from the south bringing dust and sand in thick, yellow clouds that sometimes obscure the sun. These are characteristic desert sandstorms. By the end of the third day the wind usually shifts back to the north, cooling and clearing the hot, dry air.

Since the outbreak of hostilities in the western desert a new phenomenon has been noted in the greatly increased occurrence of duststorms in that area. Whereas the yearly average prior to 1940 was five, one or more a week is not unusual at the present time. A total of 54 was reported for 1941. This marked change is attributed to several factors, chief among them being the destruction of the desert scrub by fleeing Bedawins. Although this scrub was low and sparsely distributed, the roots extended several feet in different directions and served to hold the surface soil in place. Contributing to the condition have been the extensive movements of military cars, trucks, and tanks, and the construction of fortifications.

Although present climatic conditions have prevailed over a long period of time, they were not the same at an earlier stage in the history of the area. The beginnings of the human occupation took place when North Africa was a grassland, when the Sahara flourished under regular rainfall, when the Nile was bordered by swamps, and the valley was a veritable jungle. At that time the Alps, the Pyrenees, and northern Europe as far south as the Harz Mountains in Germany were covered with ice. The rain storms that today cross central Europe then swept over the northern Sahara and the Mediterranean basin. With the melting and gradual withdrawal of the ice sheets the storm paths shifted northward and the era of progressive desiccation set in with results that today are apparent everywhere.

Because of the sharp division between the dry and the moist areas and the fact that almost all the land that will support vegetation is devoted to agriculture, the flora of Egypt is limited. There are no forests—only groves of palms fringing the river and the numerous canals, shading





1. STREET IN OLD QUARTER OF CAIRO

2. STREET IN MODERN SECTION OF CAIRO



1. PORTION OF CAIRO FROM THE CITADEL

Domed structures in background are the tombs of the Caliphs.



2. MOSQUES AND ANOTHER PORTION OF CAIRO AS SEEN FROM THE CITADEL

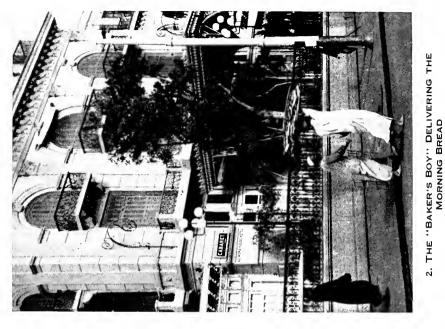


1. THE MOSQUE OF MOHAMMED ALI



2. MODERN APARTMENT BUILDINGS IN CAIRO

SMITHSONIAN WAR BACKGROUND STUDIES, NO 11





1. STREET IN THE BAZAAR AT CAIRO

the native villages, and clustering in the oases; orchards; and trees planted in gardens. The date palm is the most important. Then there are sycamores, tamarasks, the acacia, the bushy poinsettia with its brilliant red leaves, and in Lower Egypt the mulberry. In the orchards and gardens are such trees as the orange, citron, lemon, lime, tangerine, pomegranate, apricot, peach, and banana. Imported trees used in gardens and landscaping include mimosa, myrtle, elm, cypress, weeping willow, and eucalyptus. Several kinds of thorn bushes and the rushlike esparto grass grow in the desert.

Wherever there is the slightest moisture wild flowers thrive, and ferns and flowers are abundant around the springs in the palm groves of the oases. Common wild flowers are asphodels, irises, yellow daisies, ranunculuses, and poppies. Cultivated flowers do exceptionally well, and among those usually grown are the geranium, dahlia, oleander, lily, helianthus, violet, henna, narcissus, jasmine, and the Arab's favorite, the rose. The lotus no longer grows in the Nile itself but is found in the Delta. The rushlike papyrus that furnished the material for the writing paper of the ancient Egyptians has disappeared, although other kinds of cyperi still exist. Grapes do well, especially in the Fayum, and there are several varieties of melons.

There are only a few varieties of wild animals in Egypt today. These are mainly the jackal, fox, hyena, and an occasional wolf. Wild boars and a form of lynx are found in the Delta. Ibex, and possibly sporadic mouflon, occur in the hills of the eastern plateau, between the Red Sea hills and the Nile, and in the mountains of the Sinai Peninsula. Gazelles are found in the desert. Coney and jerboa inhabit the eastern mountains, and the desert hare is abundant in parts of the Fayum. Pharaoh's rat, the civetlike ichneumon, is common and frequently domesticated. It was held sacred by the ancient Egyptians and was prized because it ate snakes and the eggs and young of the crocodile. This may in part account for the fact that the crocodile is no longer found there. Gone also from the Nile are the hippopotamus, the elephant, two kinds of wild pig, and the kudu. And missing from the valleys of the tributary wadies are the Barbary sheep, antelopes, wild asses, urus, giraffes, the strange okapi, and the lions and tigers that preyed on them. The modern domesticated animals are the camel, donkey, water buffalo, sheep, goat, horse, and cattle. Dogs are ubiquitous, although it often is a question whether they should be considered as wild or domesticated creatures. There are several kinds of venomous snakes and numerous lizards. Poisonous spiders and flies are common. Mosquitoes and fleas flourish, and scorpions are everywhere.

Many varieties of fish are found in the Nile and the lakes of the Delta. As a matter of fact the largest of the lakes, Menzala, furnishes a livelihood for a large group of fishermen who dwell on its shores and islands.

Bird life is abundant, and some 300 species have been described for the area. There are several varieties of eagles, vultures, hawks, kites, falcons, buzzards, and owls. A black and white kingfisher is found wherever water is present. Snipe, sandgrouse, and quail are plentiful, and in the eastern desert and the hills of Sinai partridges are to be found. There are three species of pelican, as well as many herons, spoonbills, storks, and cranes. Ducks, geese, and teal are numerous, and the flamingo occurs in the Delta lakes. The sacred ibis is found in Egypt only in midsummer, migrating northward from its habitat in the basin of the Nubian Nile. Every village has its quota of hoopoes, pigeons, and chickens.

Although agriculture is and has been considered as Egypt's greatest source of wealth, it has other assets as well. The Red Sea hills contain gold, precious stones, and a good grade of hematite. The latter also occurs in Sinai where, in addition, there are mines of fine quality turquoise and sources of copper. There are considerable manganese deposits, and in recent years oil fields have been opened. Nitrates and phosphates occur in various parts of the desert, alum is found in the western oases, and large supplies of carbonate of soda are obtained from the lakes in the Wadi Natron. The Delta lakes furnish all the salt that is needed. Extensive quarries yield granite, porphyry, limestone, and sandstone.

Modern Egypt combines the old and the new. Yesterday and today flourish side by side, and there is a mixture of traditions, manners, peoples, and tongues that is unique. In Cairo, the capital and largest city in Africa, and in Alexandria, the chief seaport, the latest types of air-conditioned office, store, and apartment buildings rising above modern thoroughfares contrast sharply with medieval structures and ancient houses hidden away in the narrow and winding streets of the old quarters. Swank night clubs patronized by the elite and native cafes frequented by the hoi polloi prosper in the same block. There are smart department stores and the bazaars where native merchants carry on their noisy bargaining in the narrow alleyways that front their tiny shops. Men of the upper classes, faultlessly tailored in European fashion, move unconcernedly along the sidewalks with silken-robed colleagues or in the midst of barefoot countrymen clad in the sacklike linen or cotton gown of the fellaheen. Recent-model, high-priced automobiles, older styles of more common makes, occasional jalopies, electric tramway cars, horse-drawn cabs and carriages, bicycles, and donkey carts make a hodgepodge of traffic. This is true in less degree in other and smaller cities, and in the towns and villages the small houses and mud huts bespeak another age. Many of the mud-wall-enclosed communities differ little from those of thousands of years ago. Vestiges of the remote past are everywhere. Many present-day cities were built on the ruins of those of ancient times, and reminders of the Pharaohs, Greeks, and Romans are common.

#### THE PEOPLE

The population in general falls into several social and ethnic classes. The largest is that of the Egyptians proper. Then there are the desert nomads, the Bedawins, comprising several distinct tribes that are purely Arab; the Nuba who live along the Nile above the first cataract; and the many foreigners, Greeks, Albanians, Italians, English, French, Germans, Syrians, Jews, and Turks. Considerable racial mixture is apparent because Egypt has never been wholly isolated. The Delta, forming as it does a continuous plain with the coast lines of Palestine and Libya, makes Lower Egypt accessible by land routes as well as from the sea. Caravans from the western oases and from the Red Sea coast reached Upper Egypt, despite the rock-walled character of the Nile Valley, through the gorges and dry stream beds leading down from the plateaus. For various reasons through the course of time many peoples have been attracted to the area, and others, the Negroes and Abyssinians especially, were forcibly brought in to serve as slaves. The digging of the Suez Canal drew people from all quarters of the globe, made an international city of Port Said, and contributed to the heterogeneity of the coastal population. At the present time, of course, the picture is made even more complicated by the presence of large bodies of troops composed of men from many countries and nations.

The Egyptians consist of two major groups, the Moslems and the Copts. The Moslem peasant class, the fellaheen, form a big portion of the population and are a mixture, in varying degrees, of ancient Egyptian, Arab, and Nubian blood. In the upper classes the people are mainly an Egyptian-Arab cross. The Copts, the Christian element in the native population, probably approach more closely the ancient Egyptian type because from the time of the Arab invasion, in the seventh century A. D., to the present they have lived to themselves and made a practice of marrying within their own group.

The average height range for both classes, from the Delta to the first cataract, is from 5 feet  $4\frac{3}{4}$  inches to 5 feet  $6\frac{1}{4}$  inches with an average for the country as a whole of between 5 feet  $5\frac{1}{4}$  inches and 5 feet  $5\frac{3}{4}$  inches.

The inhabitants of the cities and towns are somewhat shorter than the farmers, otherwise there does not appear to be any particular correlation between variations and regional distribution. The Moslem element tends toward broad faces with strong jaws, prominent chins, full lips, and straight to concave noses of medium height and breadth. The Copts have narrower faces, slender jaws, thin lips, and narrow, aquiline noses. These features, of course, do occur in varying degrees between the two extremes. In both groups the heads are long and have moderately high vaults. Skin color for the country as a whole ranges from a small percentage of "very fair" to a larger proportion of "very dark" or chocolatehued individuals. In general, however, the tendency is to differ from place to place in accordance with the latitude. From the honey-colored brunet white of the Delta it grows progressively darker until in the vicinity of the first cataract it becomes reddish to medium brown. The Moslems generally are darker than the Copts. This may be governed in part by the fact that the latter are mainly urban dwellers and do little outside work. Eyes vary from light brown to dark brown with numerous intermediate iris patterns of mixed brown. There is a small percentage of fair eyes chiefly noticeable in the Delta region. The hair is either black or a very dark brown, although the beard may be lighter. In form the hair may be straight, wavy, or tightly curled in small ringlets. The wavy type probably is the predominant one.

One interesting group comprises the inhabitants of the Kharga Oasis in the western desert some 130 miles west of Luxor in Upper Egypt. About one-third of these people show Negroid traits, but the remainder in a general way resemble the fellaheen of Upper Egypt, although they are somewhat shorter, have slightly smaller heads, short and moderately broad faces, and straight, slightly convex noses of medium height and breadth. Their hair is almost always black and tends to be straight or wavy—for the most part somewhat straighter than that of other Egyptians. Their skin color is the tawny to medium brown of the brunet white. It is not difficult to distinguish them from the Upper Egyptians, despite the similarity of appearance, because they seem to lack the Semitic Mediterranean element present in the latter (Hrdlička, 1912). This suggests that Asiatic Mediterranean influences were not present in the region in dynastic times, that the supposition that the early Khargans were Libyans is correct, and that there has been little Arab admixture since the Mohammedan Conquest. The Negroid element in the population is attributed to the fact that the oasis became an important station on the Sudanese slave route following the introduction of the camel. Slaves were taken

in trade for food and animals, and sick slaves were left there, with a resultant infusion of Negro blood. That this occurred in relatively recent times is evident from the fact that none of the mummies and skeletons from a large Coptic cemetery of the Roman period exhibits any Negroid traits.

Beyond the fact that they are long-headed no general description of the physical characteristics of the nomads will apply to all the groups belonging in that category. Their statures and builds vary, their skins are of every color, and their noses are of every form. The Nuba are darkskinned Negroids with coarse, glossy-black hair. The foreigners, in the main, exhibit the characteristics of the inhabitants of the countries from which they came. Most of the foreign element is concerned with business or the professions. The Turks are concentrated in Cairo and other cities and form the nucleus of the aristocracy and the ruling class.

The Egyptians are inclined to be leisurely but are extremely hospitable and pleasant-mannered and converse readily with strangers. Their quick wit and keen perception are delightful, yet withal they are possessed of an innate dignity of demeanor that is impressive. For the most part they are benevolent and charitable, although shrewd in business dealings. They are deferential toward the aged, frugal in the matter of food and drink, and generally honest in the payment of their debts. They have a definite love of home and country. The members of the lower classes are prone to quarrel among themselves in a noisy and vituperative way but rarely resort to blows. Because they are fatalists, sudden and unexpected afflictions as a rule are borne with calm resignation. However, many are firm believers in the efficacy of charms and magic and do not hesitate to take such steps as they believe necessary to ward off misfortune or the "evil eye." This superstitious trait, an attribute that in no sense is peculiar to Egypt, accounts for the prevalent practice of occult arts and the popularity of astrology. Most of the people are Mohammedan in faith, Islam is the state religion, but there is a sizeable number of Christians of which the Copts constitute a majority. Arabic is the common and official language, although French, as a result of the Napoleonic and subsequent commercial influences, is still spoken by the aristocracy.

The picturesque appearance of the people is being lost in the middle and upper classes through the adoption of European dress. The ubiquitous fellaheen and his urban counterpart, however, still go barefoot and retain the long, shapeless galabieh. Many scholars and religious functionaries continue to wear the silken kaftan with hanging sleeves and long cloth outer robe or jibbeh. The dark-tasseled red fez or tarbush is universally

worn by the men. Those in European clothing wear it in its simple form, while others use it as a foundation for the turban. The shape and color of the turban usually designates the profession, religion, order, family, and class to which the wearer belongs. Another indication of social status, particularly in the case of servants, is observed in the form and color of the shoes.

Among the women still dressing in the native costume full oriental trousers, bright-colored stockings, close-fitting vests with long sleeves, and short, sleeveless jackets are the style. The materials range from dyed or printed cotton to the finest of silks, according to the financial status of the individual. The upper-class women have slippers of yellow or red morocco, and those of the poorer families wear red shoes similar to those of the men. The long head-veil is worn by all. Passing over the head, it hangs down behind except when drawn across the face to conceal all the features but the eyes. The veil is of muslin, white with embroidered ends in the case of the upper classes or simply dyed blue for the common people. Many of the women who have adopted European styles retain the veil, but in the cities it is fast becoming obsolete. The precedent set by Queen Farida has had a stimulating effect on this trend. When leaving their homes and appearing in public, those who cling to the native style of apparel are garbed in a large, loose, outer robe that completely envelopes them from head to foot. A special face-veil revealing only the eyes is also worn at such times. The appearance of the eyes is enhanced by blackening the edges of the upper and lower lids with a powder called kohl. It is not unusual for women, particularly in Upper Egypt, to wear nose rings and many stain their finger and toe nails and even portions of their hands and feet with henna. Tattooing is common among both men and women.

Owing to the increasing emancipation of women, there has been a marked change in the status of the harem. Many of the better homes and most of those of the middle classes still have portions set aside for the female members of the family and the children. For the most part these are not the places of strict seclusion known in former times, and there is little restraint to their occupants' coming and going as they please, receiving women visitors, or even their own or husband's male relatives. An Egyptian who does not want to see a person or to be disturbed has an equivalent to the western world's "in conference" in the expression "he is in the harem." Trains and trams still have "harem" cars or compartments, and passenger boats provide space for women only, so that they can travel without molestation or embarrassment at being gazed on by strange men. Use of these facilities is optional, however.

Standards of living range from the incredibly primitive conditions of the fellaheen, dwelling in mud huts and existing on dates (both fresh and dried), beans, onions, cucumbers, chickpeas, occasional scraps of meat or a small, salted fish, and unleavened bread, to the magnificent establishments and luxurious life of the well-to-do and the aristocracy. Increasing European influence has made many changes in the food habits, but stewed meats with chopped onions or other vegetables, small pieces of mutton or lamb roasted on skewers, whole roast lamb stuffed with pistachio nuts, raisins, and bread crumbs, fish dressed with oil, and numerous vegetables, including a favorite dish of boiled rice, are commonly served at the two main meals which are taken at midday and about an hour after sunset. Breakfast usually is very simple. Those who can afford them are addicted to rich pastries, sweetmeats, and the available fruits. There are various kinds of sweet beverages called sherbets that are made from sugar and water, lemons and limes, flowers of the violet, raisins. licorice roots, and the fruit of the locust tree. Coffee, however, is probably the most popular drink of the country and is served at all times. Egyptians love to sit for hours at the tables of sidewalk cafes where they talk, sip coffee, and smoke. Tobacco is the one great luxury of the men of all classes. It is smoked in long-stemmed clay-bowled pipes, in narghiles or water pipes that seem to have been an introduction from Persia, and in the form of cigarettes. As a matter of fact both coffee and tobacco are so highly esteemed that the cup and pipe are invariably presented to each guest at least once during a visit, and business transactions are usually conducted and consummated with a drink and a smoke.

# GAMES AND AMUSEMENTS

Most of the amusements of the people are in keeping with their sedentary dispositions and the climate of the country. Strenuous sports and violent exercise are not in general favor. The fact that a considerable part of the population derives its livelihood through hard labor no doubt has an important bearing on the matter. Some of the younger members of the upper classes and the aristocracy, particularly those who have been educated on the continent or in England, indulge in European diversions that call for physical exertion. On festive occasions wrestling matches are sometimes presented for the entertainment of the assembled crowd. A form of fencing in which thick staves, 5 to 6 feet long, are used as weapons is engaged in by the fellaheen for their own amusement, for small wagers, or for remuneration. Among the Bedawins and in Upper Egypt an exciting contest, formerly more prevalent than at present, con-

sists of a kind of tournament in which mounted men take turns in hurling blunt-edged palm shafts at each other. Two groups, of 10 to 20 or more men, line up several hundred feet apart. A rider crosses the intervening space, challenges one of the other group and then turns and races for his own line. The challenged player follows, approaching as near as possible, and throws as many of the 6-foot shafts at his opponent as he can before the fugitive reaches "home base." The pursuer then becomes the pursued and dashes for the safety of his own line. The object is to catch, ward off, or avoid the shafts by dexterous dodging or the speed of the horse. Despite the blunted ends, the shafts occasionally inflict severe wounds on both men and horses. The more popular games, however, are those that can be played at the coffee shops and other gathering places by small numbers of people. Among these are backgammon, chess, checkers, and several other varieties of board games.

Music in one form or another is probably the chief source of pleasure. The people are excessively fond of it, whether vocal, instrumental, or mechanical. Songs and chants set the rhythm for laborers, boatmen, and the farmers in their fields. The cries of the hawkers and the beggars in the streets are all in tune. There are professional singers, both men and women, and instrumental performers available for any and all occasions. Included among the musical instruments are varieties of the viol, dulcimer, lute, mandolin, flute, oboe, double-reed pipes, tambourine, castanets, and several kinds of drums. The music is for the most part in a minor key and has a somewhat plaintive sound. In the cities the opera enjoys a certain clientele, European orchestras have a considerable following, and just prior to the outbreak of the war Harlem swing bands were popular in the night clubs and places patronized by the upper classes. Associated with the musicians are the dancing girls for which Egypt has long been celebrated; they are even pictured on some of the ancient monuments. In addition there are men and boy dancers, but they are not as numerous nor as popular and have a rather unsavory reputation. There are many performers of sleight-of-hand tricks, snake charmers, jugglers, and rope dancers. Story tellers, the reciters of romances, frequent the coffee shops, entertain at private parties, and amuse the members of large households. Low comedy skits are presented at festivals, at the homes of the well-to-do, and in public gathering places by groups of men and boys. In these performances the female roles are played by boys dressed as women.

Some of the native theaters, corresponding to the vaudeville or variety houses of the European world, demonstrate in their shows the contrast

between old and new forms of entertainment and the acculturation process taking place in amusements. A typical performance consists of dancing girls whose solo presentations in the native style are interspersed with songs and recitations by male entertainers, by jugglers, by several low comedies, and song and dance numbers by European show girls in characteristic chorus routines. As a matter of fact the pattern followed is very suggestive of American burlesque.

There are, of course, many ceremonies, periodic public festivals, and religious observances that take place at certain seasons of the year. While in a sense they are not exactly in the category of entertainment they do offer diverting features, especially in the actions of the dervishes, and are accompanied by many of the forms of amusement mentioned above. In recent years the radio has become a popular source of entertainment, and even the poorest fellaheen can squat outside his village coffee shop and listen to his favorite Arab crooner.

The bath is a favorite resort, and while it serves an admittedly practical purpose, both from the standpoint of cleanliness and the feeling of wellbeing derived from the manipulations and administrations of the attendants, it also has its social aspects. After bathing there is time for relaxation, for coffee and a pipe, and for conversation with friends or strangers. Women are said to take special delight in their visits because of the opportunity to display their jewels and finest clothes and the fact that such occasions are made festive with entertainment and refreshments. For the younger girls and children it is a time for mirth and frolic. Even among those with private baths in their own establishments it is not uncommon for a lady and her friends, with their own attendants, to spend a sociable afternoon at one of the public resorts. Brides have often been chosen for the sons of a family from the girls or women the mother has seen there. Those who do not have the necessary fees or who live in villages where there are no baths are not forced to forego the pleasure of bodily cleanliness, or the religious insistence on such a condition, as they have recourse to the Nile and the waters of the numerous canals. In warm weather it is not at all uncommon to see people bathing in the open.

### EDUCATION AND SOCIAL WELFARE

As might be expected where a large majority of the population is of the fellaheen class, there is a high percentage of illiteracy. For those privileged to receive instruction two systems of education are available. One is indigenous in character and the other is based on European methods. The Ministry of Public Instruction has general supervision over both. The native system is mainly concerned with Islam and the traditions of the Prophet. In the elementary schools the pupils learn to recite portions of the Koran, to read and write Arabic, and to solve problems in simple arithmetic. Where such schools are under governmental control some secular subjects are also taught. Those desiring to continue in this line of instruction proceed to the mosque of El Azhar in Cairo. This almost 1,000-year-old university is regarded as the chief center of learning and the intellectual capital of the whole Moslem world. Its curriculum consists of studies in theology; of the religious, moral, civil, and criminal laws as founded on the Koran and the traditions of the Prophet; some mathematics and natural science; and Arabic grammar, rhetoric, logic, versification, and literature. The European type of education may be obtained in schools sponsored by various missionary societies, the Mohammedans, Copts, Hebrews, and the Government. The Government has primary, secondary, and technical schools; teachers colleges; colleges of agriculture, veterinary sciences, law, engineering, and medicine. A national university for literary, scientific, and philosophical studies was established at Cairo by prominent Mohammedans as a private enterprise, and under royal decree a number of the higher professional institutions of the Government have been incorporated to form an Egyptian University.

The Government's program for the prevention and control of disease has had an increasingly beneficial effect on health conditions in recent years. Excellent results have been obtained from the installation of efficient water supply and sewage drainage systems in the cities and many of the larger towns; from the draining and filling of swamps in malarial areas; by the inspection and control of laboring conditions in industry; from milk and pure-food laws; by the establishment of ophthalmic and general hospitals; free medical treatment for the poor at dispensaries, maternity homes, and children's welfare centers. The rate of infant mortality, however, remains high. Epidemic diseases such as typhus, relapsing fever, bubonic plague, and cholera have been brought under control, and by means of mobile dispensaries progress is being made in the treatment of hookworm (anklostomiasis) and blood flukes (bilharziasis), parasitic ailments widespread among the fellaheen.

#### AGRICULTURE AND INDUSTRIAL ACTIVITY

As it has been since the days of the Pharaohs, Egypt's principal means of livelihood is agriculture. About half of the male population is engaged in that pursuit and a majority of the other occupations are in some way

related to it. The great productivity of the country is directly attributable to the Nile. The river provides both the farm lands, in the rich alluvium formed from the silts brought down from the Abyssinian highlands by annual floods, and the water needed to sustain growing crops in an arid region. Originally there was but one planting and harvest each year. Now, because of the most elaborate system of dams, barrages, and canals ever constructed, the flow is regulated and it is possible to irrigate throughout the year. As a consequence much of the land produces two or three crops.

In Upper Egypt, where provisions for perennial irrigation have not yet been made, the basin system is used. Under this system the land is separated into basins of variable size by the erection of rectangular embankments or dykes. When the Nile is in flood, water is led into the basins through shallow canals. The water is left on the land for 2 weeks or longer, attaining a depth of 3 to 6 feet, and then is drained back into the Nile which in the meantime has fallen. This system is ages old in Egypt and was the prevalent method until the early part of the nineteenth century, when Mohammed Ali established barrages and a large network of canals and put perennial irrigation into practice on a large scale in the Delta. Normally only one crop a year could be grown on basin lands, but by means of steam pumps, wheels turned by water buffaloes, or water lifts worked by hand second crops are produced on such areas. The same kinds of mechanical aids, including the hand-powered Archimedean screw, are used to obtain water from the canals when their levels drop below that of the surrounding fields. Because perennial irrigation tends to raise the level of the subsoil water, the land is likely to become waterlogged and impregnated with salt. To remedy this condition a network of open drains to carry off the surplus was constructed and is continually being expanded. These drains empty into the lakes along the coast of the Mediterranean Sea.

There are three main sowing seasons. From February to May cotton, sugarcane (some sugar beets are also grown), rice, millet, peanuts, sesame, and some vegetables, the summer crops, are planted. The flood-season crops consisting of maize and "flood" rice, sometimes millet as well, are sown late in July or early in August. The winter crops are wheat, barley, flax, beans, onions, lentils, and other vegetables. The planting of this group starts in November. The actual sowing time varies somewhat from the Delta through Upper Egypt because of differing climatic conditions. On large farms iron plows and machines for threshing and cleaning grain are a part of the equipment, but the ordinary husbandmen retain the

simple wooden plow and other native paraphernalia. Cotton is by far the most important crop and is the principal source of national wealth. The yield per acre is greater than in any other cotton-producing area, and the staple is of excellent quality. The Government sponsors extensive research and experimentation in order to maintain and improve on the present high standard. Because the purchasing power of the country has depended so largely on this single crop, variations in the harvest and fluctuations in the market have had direct bearing on conditions in general. During the widespread depression following World War I, Egypt and its people suffered in no small degree from this reliance on monoculture. As a result the Government took steps to encourage the improvement and development of other crops, to introduce new ones, to find outlets for additional agricultural exports, and to establish new agricultural industries. These efforts helped, but at the outbreak of World War II the country had not been able to recover wholly from its unsatisfactory economic status. The beginning of hostilities created new difficulties, and Egypt for a time suffered severely from their effects

Because of the lack of certain natural resources, such as an abundance of cheap coal and sufficient electric power, Egypt has not been in a position to establish extensive factory systems and make full use of its abundant manpower in an effort to compete with modern industrial countries in the field of manufacturing. As a matter of fact practically all the manufactured articles required by the population have long been imported. In recent years, however, there has been increased activity in the development of industries that serve local needs and for which essential raw materials are available in the country. Plans for the erection of a hydroelectric plant to make use of the overflow at the Aswan Dam are under way, and if the project is completed, the power can be used for the industrialization of Upper Egypt. Petroleum refining is carried on at Suez, and the latest and most scientific processes are employed. In connection with the refinery are plants for the manufacture of asphalt, of iron barrels, and of tin containers for gasoline and oil. The manufacture and refining of sugar from cane and beets is one of the most important industrial activities in the country and one that is capable of considerable expansion. Large-scale manufacture of Portland cement, for which there is an abundance of raw material, is a recent development, and the results have been satisfactory both in the quality and quantity of the product. Building materials, such as bricks, tiles, glazed tiles, stoneware pipes and fittings, and enameled sanitary wares, are being



1. THE SAHARA



2. OX TURNING WHEEL TO LIFT WATER FOR IRRIGATION

Jugs fastened to ropes passing over wheel in right foreground raise the water and empty it into wooden flume.



1. SAILBOAT ON THE NILE
Western cliffs of the valley in the background.



2. NILE STEAMBOAT IN UPPER EGYPT Typical fellaheen in left foreground.





1. MUD-WALLED VILLAGE IN UPPER EGYPT



VIEW ACROSS THE ROOF TOPS OF A NATIVE VILLAGE IN UPPER EGYPT

made in increasing quantities. Associated with this is the manufacture of artistic pottery, semiporcelain crockery, and refractory materials for use in high temperatures.

The spinning and weaving of cotton by factory methods is not done on a large scale as yet, and the weaving of linen on modern equipment has only recently been started, although both kinds of cloth have long been made on native looms. The installation of modern silk-weaving machinery in some factories indicated increased production for that line of material, but the outbreak of hostilities has interfered with that as well as other activities. A large number of workmen are employed in the dyeing industry, although the processes followed are inefficient and antiquated and the work is done in small establishments. The Government has endeavored to improve the situation by erecting a model dye plant in which modern methods are taught and is taking steps to assure that this industry will keep pace with developments in the expanding field of textile manufacture. Tanning and the manufacture of soap also follow antiquated lines, but definite efforts are being made to improve the quality of the hides available for the local tanners in order to better the finished product, because a recently established machine-made boot and shoe industry is in need of high-grade leathers. A considerable number of workmen have been engaged in the manufacture of cigarettes, and this has been one of the flourishing industries. All the tobacco used was imported, however, and as there was considerable export trade in the finished article the war, as well as the competition of cheaper foreign brands, has had a depressing effect that is only partially alleviated by the presence of many soldiers. Numerous varieties of perfumes have long been made for the local market, and some kinds have been popular with the tourists. There are, of course, many small shops devoted to the making of handwoven silk shawls and draperies, rugs and leather goods, furniture, ornamental wood and ironwork, the weaving of mats, baskets, and other products from palm leaves and rushes, and the manufacture of silver, gold, brass, and copper objects. The building of boats for use on the Nile and the numerous canals is an important trade. Flour mills grinding maize and other grains for home consumption are found in all parts of the country, and there are rice mills in a number of towns in the Delta.

There are various modes of transportation, and here again there is a mixing of the old and the new. The great commercial artery is the Nile, and the bulk of the country's heavy goods is carried on its surface. There are steamboats, motorboats, sailing craft, and broad, flat-bottomed boats

suggestive of the Chinese dhow. The latter are the principal carriers of freight, drifting downstream with the current and working back up the river by means of sail and manpower. The boatmen frequently are obliged to take to the towpath and literally pull their craft by ropes attached to their shoulders. State owned and operated railways run from Alexandria and Port Said to Cairo and thence up the river some miles beyond Aswan at the first cataract. Branch lines connect most of the towns of the Delta with Suez, Cairo, and Alexandria. Privately owned light railways supplement the regular lines in the Delta and are used in the Fayum. Highways for motor traffic have been built between many of the main cities as part of an extensive program started in 1937, and there are numerous secondary roads that can be traversed by wheeled vehicles. Since the start of the present war the number of roads, especially in the area north of Cairo, has been greatly increased through the work of the British and later the United Nations forces. Caravan routes lead east to the Red Sea and west to the oases. On these the camel still remains the chief means of transportation. Communication with the outside world is by means of steamers, both by way of the Mediterranean and the Red Sea and Suez Canal, by rail and highway to Palestine, and by airlines to various points in Europe, South and West Africa, and Asia. At present Cairo is the center of air communications for the United Nations in the Middle East.

# THE GOVERNMENT

Since World War I Egypt has been an independent state with a hereditary monarch having the title of King. Prior to that time it was a tributary of the Turkish Empire and was ruled by a khedive appointed by the Sultan. At the outbreak of the war in 1914 Egypt joined the Allied cause, and when Turkey went in on the side of Germany and the Central Powers, Great Britain proclaimed a protectorate over Egypt. During the post-war settlement period the principles of self determination proposed by Woodrow Wilson set off a series of violent repercussions that eventuated in the negotiations leading up to the proclamation in 1922 of Egypt's status, with reservations, as an independent sovereign state with Fouad I as its first King. Great Britain reserved the right to protect its lines of communication, to defend Egypt against foreign interference and aggression and thus to maintain a small standing army on its soil, exempted foreigners from taxation and the jurisdiction of the local courts, and retained certain controls over the country's finances. A constitution pre-

pared by a special commission was announced on April 19, 1923. It provided for a parliament of two houses, a senate and a chamber of deputies, and a ministry responsible to the deputies. Two-fifths of the members of the senate were to be appointed by the crown and three-fifths were to be elected by indirect vote. The term of office was for 10 years with one half of each group renewable every 5 years. Deputies were to be elected by universal suffrage for a term of 5 years. The constitution could be revised by a two-thirds majority in each house. The ministry, to which only native Egyptians were eligible, was to be named by the King. The ministers were to be responsible to the chamber of deputies, jointly for the general policy of the State and individually for the administration of their own respective ministries, and in the case of a vote of no confidence were to be dismissed by the King.

In the interval between the promulgation of the constitution and the summer of 1936 there was considerable friction, frequently resulting in riots and on some occasions in bloodshed, between the British and Egyptian Governments over the status of the Anglo-Egyptian Sudan, the presence of a British army in the country, and other reservations in the proclamation of independent sovereignty. The situation was complicated by internal political strife fostered by the failure to reach an agreement with Britain, by adverse local conditions resulting from the general world depression, and by a struggle for power between the King and various political leaders. This struggle led to the dissolving of parliament on two occasions, the restoration of the system of legislation by royal decree, and two short dictatorships by encumbent prime ministers, the promulgation of a new constitution giving the King more power, and the subsequent abolishment of this new constitution and the restoration of the old one. Lagging negotiations for the settlement of disturbed relations were stimulated by Mussolini's attack on Ethiopia, with the result that in 1936 Britain again recognized Egypt's independence and the two countries agreed upon a treaty of friendship and alliance. As an outgrowth of this provisions were made in 1937 for the eventual withdrawal of the reservations made in 1922, Egypt was admitted to the League of Nations, and was given permission to expand and modernize her army under British supervision. On the other hand Britain was granted the right to maintain the naval base at Alexandria and a garrison and force of planes in the Suez Canal zone. While the treaty negotiations were under way in the spring of 1936 King Fouad died and was succeeded by his son Farouk. Because the latter had not reached his majority, a Council of Regency, named by Parliament, took over and ruled until 1937 when Farouk ascended the throne. The new King quickly became popular with the people, and although under the provisions of the constitution he is supposed to reign and not rule, he actually has attained and exerts considerable power.

When Great Britain declared war on Germany in September 1939 Egypt broke off diplomatic relations with Germany, proceeded to freeze that country's assets, sent home or confined German nationals, and took steps toward putting the country on a war footing. Two days after Italy went to war with Britain and France in June 1940 similar action was taken. After fulfilling these technical requirements of the 1936 treaty, Egypt assumed a nonbelligerent status that has been maintained to the present time. Troops were even withdrawn from the Libyan frontier to prevent clashes with the Italians. When actual invasion of western Egypt and the bombing of Cairo, Alexandria, and other cities by the Italians took place, the defense was left entirely to the British. Full use of airfields, ports, and military bases and the right to build new defense works were granted to the British, however, and since the entry of the Americas into the war these privileges have been extended to all United Nations forces.

Political reasons are mainly responsible for Egypt's anomalous policy, although certain strategic factors play a part in the situation. For a time, particularly after the fall of France, there was considerable doubt over Britain's ability to survive. Many thought that Egypt would fare better as a nonbelligerent than as a participant in the conflict. Also, considerable stimulus to a general anti-British feeling was engendered by the establishment of the blockade against the Axis powers, the attendant cutting off of most of the export trade, and the soaring cost of imports. Rising taxes and the fact that more than 100,000 persons were thrown out of work created a critical situation capitalized upon by the anti-British element. This was partially alleviated by the defeat of Graziani's forces at Sidi Barrani and Britain's taking over the 1940 cotton crop. Subsequent Italian losses in other parts of Africa, particularly in East Africa, aided further, and as the growing expenditures of the British forces began to have a noticeable effect, the economic picture brightened. Increased expansion of military bases by the United Nations since the United States became a participant has helped even more to compensate for the loss of foreign trade. As the tides of battle have ebbed and flowed across the northern Sahara, however, there have been corresponding rises and falls in the feeling of many Egyptians toward the conflict.

There has been considerable diversity of opinion over the war. One group has been opposed to intervention. Another, even though strongly

anti-British, has favored a declaration of war against the Axis. Others have felt that they should join their ally, but that nonbelligerency was probably the best policy. The full effect of the United States and other American nations joining the issue is still to be determined, although recent assurances that Egypt would be represented at the peace table and exchanges of felicitations between the Governments of the United States and Egypt have improved the situation greatly. There is no question but that a majority of the upper classes feel that Egypt's future welfare lies in a United Nations' victory, yet their desire to eliminate all British influence still persists.

Even though they have male suffrage the fellaheen exercise little influence on the policy of the Government, in fact the reverse is actually the case. Because of illiteracy they have had to depend in large part on the radio for knowledge of what is transpiring, and this has left them in a badly confused state of mind. They have heard news and propaganda broadcast by the Axis and by Britain, and as the speakers are Arab, hence should not deceive a fellow Moslem, they are in a quandary as to what to believe in the mass of conflicting statements. To counteract this condition the Egyptian Government has endeavored to keep them in line by fostering a nonbelligerent attitude.

From a strategic standpoint such assistance as Egypt can offer in the form of actual military participation by her small, although excellent, mechanized army, air force, and naval units would add little to the balance of power in Africa. It probably would not be sufficient to offset the damage suffered in return. The country is not prepared to withstand heavy bombing, even though some 20 percent of the populations of Cairo and Alexandria have been evacuated, shelters have been provided in certain areas, and blackouts have been enforced. The bulk of the people, regardless of the tendency toward a fatalistic attitude, is liable to mass panic and is not equipped against the effects of concentrated air attacks. Under such conditions, in so densely populated a country, the loss of life would be appalling.

From a broad military point of view the importance of Egypt is that it lies across the path to the Near East and the overland route to India. Although the Axis powers would profit from the cotton, cereals, fruits, and other supplies, and the vast source of raw labor they could obtain in Egypt, they would gain far more by acquiring access to the oil fields of Iraq and Iran, by stopping the flow of matériel to United Nations forces in the Middle East through the Red Sea and the Suez Canal, to Russia by way of Iran and the Caspian Sea, and by dislodging the United

Nations from the eastern Mediterranean. Egypt, as far as the United Nations are concerned, consists of the British naval base at Alexandria and the Suez Canal. All depends upon their being held, and it was to this end that troops, machines, and mountainous piles of supplies were poured into the area in an ever increasing stream until General Montgomery was properly prepared to launch his successful drive against Rommel.

## ANCIENT EGYPT

The story of Egypt begins before the dawn of civilization. Archeological and historical investigations have shown that it encompasses the span from the early old stone age to the present age of mechanical marvels. When North Africa was a pleasant grassland and much of Europe was frozen tundra or wind-swept steppe, hunters from the plateaus were wont to visit the borders of the lush Nile Valley and prey on the animals so abundant there. Evidences of such forays are the flint implements of Lower Paleolithic type scattered over the highlands, on the terraces, and embedded in the conglomerate formed from stone and gravel washed down from the plateaus and cut into terraces by the river when it flowed at a much higher level than that of today. Early in the Pluvial or wet period in this area, corresponding to the last glacial stage in Europe, the core or fist-ax type of implement, in the Chellean-Achulean tradition. began to be replaced by tools made from flakes. These artifacts are comparable to those of the Mousterian industry in Europe, the end of the Lower Paleolithic division. Toward the close of this period the Nile stopped cutting down through its bordering walls and began depositing silts, building up its bed as it continues doing at the present time. The aggradation of the valley bottom covered over most of the manifestations of cultural growth and continued occupancy of the area, but Upper Paleolithic implements found in the valley itself show that these excursions had continued.

With the appearance and increasing recurrence of droughts in the area adjacent to the Nile, resulting from the beginning of the glacial retreat in Europe and decreasing pluvial conditions in North Africa, the well-watered valley offered even greater attractions for the nomads, and more and more joined their fellows along the river borderlands. The valley still was mainly marshland, and large trees grew along the bases of the bordering bluffs. Conditions were ideal for bringing on a transition in the mode of life, and the change from a parasitic to a productive economy got under way. In the initial stages hunting and fishing remained the chief pursuits, but seed, root, and berry gathering and the use of vegetal

foods assumed greater importance. New implements in the form of axes needed to work the timber were made by grinding sharp edges on pebbles and flint nodules. Milling stones on which to prepare meal from the grains obtained from the grasses growing along the edges of the valley were developed. The people tended to become more sedentary in their habits and began making rough pottery. They established more or less permanent villages and, learning from Nature's example, each summer when the Nile floodwaters had receded scattered seeds over the wet silt and waited for the harvest. The abundance of the latter necessitated the provision of floors and bins for threshing and storage, and these traits were added to the cultural complex. In addition the domestication of animals gained impetus, and sheep, goats, cattle, and in some cases swine, were kept. The leisure thus gained was turned to furthering the arts and crafts. This new era is the Egyptian counterpart of Europe's Neolithic, and examples of it have been uncovered at Tasa, near Badari in Upper Egypt, in the Fayum along an old beach line of the extensive lake that formerly filled that depression, at Merimde on the western edge of the Delta, and recently near Beni Salame on the western side of the upper Delta. There are local differences in the material found at these places, but they seem to be variations of a single culture and attributable to a single people.

Highly favorable climatic conditions prevailed for a time. The people of the Fayum and Merimde continued to hunt and eat the hippopotami present in the marshes of the Delta, but the forces of desiccation were under way, and manifestations of increasing cycles of droughts are present in the layers of drift sand occurring between the layers of refuse in the dump heaps of those communities. Merimde finally was abandoned to the encroaching desert. In the Fayum the people followed the waters of the shrinking lake, their culture degenerating with the progressive lowering of the beach levels, until they too eventually disappear. It has been suggested that the groups from the Fayum and Merimde took refuge in migration, moving westward to Morocco, across to Spain, to the Swiss lakes and to the Rhine, and that their descendants were responsible for the Neolithic in Europe. In Upper Egypt there was an influx of new peoples, and definite efforts were made to offset changing conditions. Evidences for this development were found in the remains of cemeteries and settlements near Badari. These newcomers took over and elaborated the culture of the Tasians. That they were a different people is shown by their physical characteristics. They were shorter, slenderer, more delicately built, and their small, narrow heads with a suggestion of the

Negroid about them contrasted with the broader, although long and more capacious, ones of the Tasians whose physical type seems to disappear. They too may have migrated westward and joined one of the Saharan groups.

The new people are believed to have come into Egypt from the south, possibly migrating from territory near the headwaters of the Blue Nile, yet their origin is still uncertain. Initiation of the practice of draining the swamps along the Nile to provide new fields to replace those made useless by the decrease in precipitation and encroaching sand has been attributed to these people. They lived in semipermanent villages, moving from site to site as needs required, and still placed some reliance on hunting and fishing to augment their larder. There was considerable progress in material culture as is shown by their knowledge of metallic copper and the use of actual boats instead of simple rafts. The ceramic industry produced during this period pottery that exhibits a perfection of technique never surpassed in the valley. The elements of a form of writing, developed from the hunting signs of the Paleolithic period, came into use. Trade relations are indicated by the presence of malachite, brought either from Sinai or Nubia; shells from the Red Sea; cedar and juniper wood, resin and turquoise beads from Syria. This trend toward imported materials eventually culminated in one of the important factors in Egyptian economy. Burial was in simple trench graves, sometimes lined with matting, and the body was placed in the flexed or crouched position. These graves generally were grouped in small cemeteries. Mortuary offerings consisting of pottery, stone implements, ivory and shell ornaments, female figurines, and amulets representing animals were interred with the deceased.

# PREDYNASTIC EGYPT

A subsequent infusion of more new blood, probably from Libya by peoples separate from, but related in origin to, the Badarians, introduced the first in a sequence of cultures that has been called the Predynastic. The opening stage or Early Predynastic is also known as the Amratian stage. Its remains occur from Badari to Lower Nubia, and the characteristics of its cultural material have been established by information obtained from village sites and cemeteries. The Amratians placed greater reliance on the products of the field and their herds, though continuing to hunt and fish, and adopted a more settled mode of life in regular villages. The flimsy, wind-screen structures of matting previously used were replaced by circular huts with partially excavated floors. The



1. NATIVE LABORERS, BOTH MEN AND WOMEN, WORK ON EXCAVATION PROJECTS



2. TOMB OF A "PILGRIM" WHO MADE THE JOURNEY TO MECCA AND RETURN, UPPER EGYPT



ZOSER AT SAKKARA

This third-dynasty tomb is the oldest of the pyramid structures.



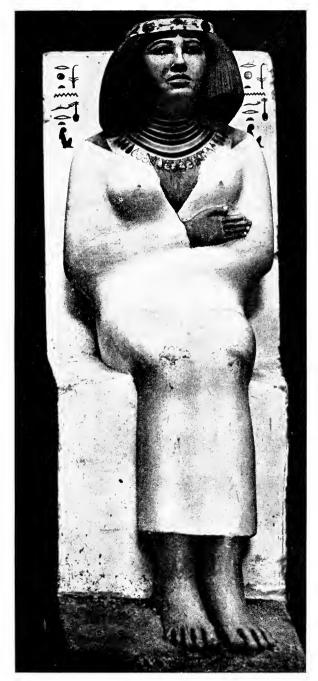
2. RUINS OF A CHAPEL AT SAKKARA



1. EXCAVATING CREW AT SAKKARA



2. WORKMEN OF AN EGYPTIAN PROJECT FOR CLEARING ACCUMULATION OF SAND FROM AROUND THE GREAT SPHINX AT GIZEH



NOFRET, WOMAN OF THE FOURTH DYNASTY, EGYPTIAN MUSEUM AT CAIRO

Amratians also improved on the arts and crafts of their predecessors, increased the use of copper, and expanded foreign trade relations. There are indications in this era of the beginning of clans with specific totems as distinguishing marks. The disappearance of the stone ax and celt from the implement complex suggests further environmental changes and the probable extinction of the ready source of timbers for constructional purposes. Some new types of tools, a different kind of arrowhead, and a new style of ceramic decoration were introduced. These seemingly were of North African derivation and their presence correlates with the belief that the new element in the population came from the Libyan nomads. The physical appearance of the people in many respects was like that of the Badarians. They continued to be slender and slightly built but were taller, their long, small skulls and faces were somewhat larger and wider, their noses were narrower, and they had straight hair. The hints of Negroid traits previously present disappear. It is probable that the Badarians were absorbed by the more numerous new members in the population, although there is no definite evidence to prove this. Burials during this period were more elaborate and show a growth in religious beliefs. Mortuary offerings consisted of weapons, ornaments, food, statuettes of women and servants, and clay models of cattle and other possessions. These things, through sympathetic magic, would provide for the things needed in the future life.

Despite the fact that Egypt centers on the Nile and owes its very existence to that stream, the long, narrow strip of country with its physiological differences beween Upper and Lower Egypt was not conducive to unified cultural and political growth. Hence developments in the Delta differed and did not follow lines similar to those discussed for Upper Egypt. After the abandonment of the Merimde communities and the disappearance of their culture there was an interval about which little is known, although the picture of earlier stages in the transition may become clearer when the information obtained from the recent excavations in the Neolithic village and other remains near Beni Salame are available. There are some indications in the Delta of a culture allied to the Amratian. The latter, however, probably never penetrated north of Badari. Valuable evidence unquestionably was swept away by the Nile floods or has become so deeply buried in the silts deposited by the river that it will never be found. As a consequence it is not possible to show the steps leading up to the appearance and subsequent growth of a definitely Asiatic pattern in the Delta. That such transpired, however, is demonstrated in Upper Egypt by an increasing infiltration of

new types of implements, ornaments, dress, and other elements that cannot be attributed to an evolution from older forms. The changes were too abrupt and the differences too marked to be accounted for except by introduction from an outside source. In the beginning only a few of these elements appear in the Amratian complex. As time went on they intruded more and more until they became dominant and in many cases completely replaced the older forms. That these new elements must have come from the north, the Delta, is demonstrated by the fact that they do not occur in some of the sites in farther Upper Egypt nor in the Nubian region to the south.

The stage succeeding the Amratian is called the Gerzean, the Middle Predynastic, or the Predynastic Tribal Stage. Although in some respects there was a distinct break with the past, the period was not one in which there was complete substitution of one form of culture for another. Much of the old was retained and became an integral part of the developments produced by the stimulus of new ideas and a broadening horizon. Totemic clans were now firmly established. Agriculture assumed even greater importance, and hunting declined to such an extent that weapons for that purpose were no longer buried with the dead. The houses became flat-roofed, rectangular structures made of mud or wattle and daub and had framed doorways on one of the long sides. Some of the villages grew to be towns that later were to become the capital cities of the various regional divisions. With the growth of these centers there was attendant progress in the various crafts. The material culture attained a richness and technical excellence previously unknown, and there were marked changes in the matter of dress and types of weapons. A new type of pottery appeared, and some of the older wares ceased to be made. It was during this period that the marvelous flint blades considered so typical of Predynastic Egypt were made. Copper tools were known although not common, and the stoneworker's art flourished. There was an increase in foreign trade, and in addition to previously mentioned articles, lead, silver, amethyst, and lapis lazuli were imported in increasing quantities. The game of checkers was introduced, and the use of amulets became more pronounced. For the first time there is definite suggestion of a form of chief or headman. This is shown by the presence of tombs containing funerary offerings indicative of wealth and power above and beyond that of ordinary men who continued to be buried in simple trench graves. One tomb in particular, belonging to the end of the Gerzean period and located at Hierakonpolis, foreshadows the later sumptuous sepulchers of the various kings in that it contains

a crude mural depicting dances, fights between men and ships, and hunting scenes. Here was the beginning of the tomb art that became so elaborate in subsequent eras and is the first evidence of an individual's rising to a status of leadership that eventually would make possible the establishment of a kingdom. Toward the end of this period there probably were about 20 "petty" states in Upper Egypt, each under its own chieftain.

Despite the fact that several racial elements entered into it and that two distinct cultures or beginnings of cultures are represented, the developments thus far in the Nile Valley probably were the result of a continuous local process. Although Gerzean characteristics point toward an Asiatic origin, their center of growth certainly was in the western Delta, and there is no definite proof that they actually were derived from Asia. Such similarities as occur in the Mesopotamian area might well be the result of influences stemming from Egypt rather than the reverse. The early Minoan civilization of Crete owed much to Egypt, and other areas undoubtedly did also.

The span of years from the first appearance of men of the old stone age along the borders of the Nile Valley to the end of the Gerzean period saw marked changes and the development of many things that were to have a tremendous influence on the future of all mankind. There was the important transition from a nomadic-parasitic to a sedentary-productive mode of life. The domestication and improvement under controlled breeding of cattle, sheep, goats, donkeys, wheat, split-wheat, barley, millet, and flax made civilization possible. The actual number of years involved in these developments is still a matter of question as there is no means for giving specific dates before the establishment of the Egyptian' calendar. From estimates based on that calendar and from other sources. such as the rate of deposition of silt in the valley and the numbers of layers representing annual floods in the Nile, conservative students suggest that the Tasians were on the scene about 6000 B. C.; that the Badarians were active between then and 5000 B. C.; and that the Amratians, Gerzean, and Late Predynastic stages occurred in the interval lasting from 5000 to about 3000 B. C.

### THE PROTODYNASTIC EPOCH

During the Late Predynastic stages the heads of the numerous petty divisions gained greater control and set up a series of small kingdoms, establishing themselves as kings. Towns grew into cities and became the capitals of these rulers. There was continual strife between these small

states, and a gradual absorption of the weaker by the stronger ones. Numerous culture traits, articles of various kinds, and artistic motifs originating in Mesopotamia made their appearance. For the most part they occurred only sporadically and constituted a passing fad, although they continued to be a definite part of the cultural complex in their homeland. As the period drew to a close the population was welded into smaller and smaller units until two main kingdoms emerged, one in the Delta and one in Upper Egypt. This local kingdom phase is generally referred to as the Protodynastic epoch. Knowledge of the two kingdoms, unfortunately, is meager. The kingdom of Upper Egypt was definitely more Egyptian than that of the Delta. Its capital was at Nekheb. the present El Kab, and its symbol was a lily plant. The distinguishing color of the country was white. Lower Egypt and the kingdom of the Delta seems to have been under strong influence from Libya. The seat of government was at Pe, a suburb of Buto. A papyrus plant, common in the Delta marshes, was its symbol, and red was the distinctive color of the kingdom. Both had their protecting goddesses. The vulture-goddess, Nekhbet, was the patroness of Upper Egypt, while the serpent-goddess, Buto, was the guardian of the Delta. The hawkgod, Horus, however, was worshiped as the patron deity of both kings.

Only a few names of the Delta kings have survived, and with one possible exception none is preserved from Upper Egypt. They are generally referred to as the "Dead" or the "Heroes" and were regarded as being intermediate between the divine and human dynasties. Little is known of their deeds, and a few of the tombs belonging to that epoch have only recently been discovered. Whether any of them actually was the final resting place of one of these kings is questionable. They may be the sepulchers of lesser members of the royalty. During the time that they reigned, however, the population was consolidated, the arts and crafts progressed, copper was more widely used for tools and weapons although flint was by no means abandoned, tombs became more elaborate, the woodworkers' trade was revived under the stimulus of imports of lumber from Syria, there was considerable development in religious beliefs and practices, and some genius in the region of the upper Delta devised and elaborated a calendar to guide the farmers in the matter of the seasons of flood, planting, and harvesting. Throughout this period, in fact from Gerzean times, Upper Egypt unquestionably was dominated and greatly affected by Lower Egypt. Toward the end of Protodynastic times, however, the ascendancy of more powerful rulers in the south began a reversal of this relationship, and under King Menesconsidered as a single individual by some and a composite of several kings by others—the supremacy of Upper Egypt was established and the two kingdoms were united. This union was symbolized by the wearing of the crown of either kingdom, the white of the south or the red of the north, or by a curious sort of double crown. Following his successful conquest of the Delta, Menes moved north and, after building a dyke to divert the Nile and make it a barrier against the Arabs on the east, he founded the city of Memphis, at that time called "White Wall," and erected the temple of Ptah, the patron of the artisan, artificer, and artist. Memphis was located a short distance south of the present city of Cairo.

## THE DYNASTIC PERIOD

With the advent of Menes and the unification of Upper and Lower Egypt at about 3000 B. C., the Dynastic or historic period begins. Three outstanding epochs of prosperity and splendor characterize this portion of the story of Egypt. The first is known as that of the Old Kingdom, the second was the Middle Kingdom or the Feudal Age, and the third was the New Empire. There were other periods, of course, but they were not happy or particularly fortunate ones as far as the Egyptians were concerned. They were times of civil war, conquest, and subjugation.

### THE OLD KINGDOM

The Old Kingdom encompasses the first six dynasties. It was the pyramid age of Egypt, the climax of which was reached in the fourth dynasty with the building of the great pyramids at Gizeh, near Cairo.<sup>1</sup> This structural development represents one of the greatest outbursts of cultural energy in human history, because within a century and a half from the time the first stone blocks were laid in the place of mud bricks in the lining of tombs, the peak of stone construction was attained in the building of the pyramid of Khufu (Cheops),<sup>2</sup> a work that is reputed to have required 20 years time and the labor of over 100,000 men.

<sup>&</sup>lt;sup>1</sup> The Great Sphinx near the pyramids is the portrait of a Pharaoh, the lion's body symbolizing his power and his omniscience. It probably dates from the fourth dynasty and may represent Khafre (Chephren), the third ruler in that dynasty and the builder of the second pyramid.

<sup>&</sup>lt;sup>2</sup> The different names for Egyptian kings are attributable to the practice of using either the Greek forms, which are popular with some groups of students, or the Egyptian words phonetically transcribed into one of the modern languages. In the latter case variations in spelling result from the system employed as well as the particular language involved.

The immensity of the project is indicated by the fact that some 2,300,000 blocks of stone averaging  $2\frac{1}{2}$  tons each in weight were used in its construction. The high civilization attained at Memphis at this time characterized by the perfection of cursive writing and its introduction into general use, the excellence of the arts, sculpture, music, and literature, including the so-called Book of the Dead, marks an epoch in Egyptian history. Pyramids, actually huge cairns erected as tombs to mark and guard the sarcophagi of the kings, continued to be built until the time of the New Empire, but they no longer were considered as of as great importance nor as the chief monument to be left by each ruler. In the second dynasty the worship of sacred animals and the right of a woman to rule over the country were introduced. Successful raids were made against Nubia in the third dynasty, the Sinaitic Peninsula was conquered and its copper mines opened with an attendant general use of that material for tools, weapons, and vessels.

In the fifth dynasty the worship of Re, the sun god, supplanted that of Horus, the hawk, and magnificent obelisks and temples in honor of Re were erected throughout Egypt. The growing strength of local officials and their assumption of power as chiefs or lords brought about the fall of this dynasty. It was followed by the sixth and last of the Old Kingdom. The first Pharaoh of import in the new line, Pepi I, was not from Memphis but a different part of Egypt. He was a strong character and was able to gain control over the local nobles. He also carried on a vigorous foreign policy extending control over the Negro tribes in Nubia, even to the extent of obtaining Negro levies for his armies, and moved against the Arabs as far as the highlands of Palestine, the northernmost point reached during the whole of the Old Kingdom. On his death he was succeeded by his son Mernere who continued the efforts to subjugate the southern area, and as a part of this program constructed a canal that made it possible for Nile boats to pass the first cataract at periods of high water. This facilitated control over northern Nubia and increased the flow of traffic down the river, the bringing in of gold, ivory, ebony logs, panther skins, and ostrich feathers. Aromatic woods, fragrant gums and resins, and myrrh also came in over this route from the Somali coast and the lower end of the Red Sea. During Mernere's reign the earliest known explorers of inner Africa and the southern Red Sea, a group of daring and adventurous nobles from southern Egypt, extended the prestige and trade relations of the Kingdom in the distant regions of the south. All this was interrupted by the untimely death of Mernere and the succession of his half brother who became known as Pepi II.

The latter was a child of 5 or 6 when he ascended the throne and until he attained his majority the country was ruled by a vizier.

When the new regime was firmly established it resumed operations in the south and also carried on extensive trade with the north, the ships of the royal fleet bringing cedar from Lebanon and other products from the island civilizations in the Mediterranean. Pepi II is probably best remembered for the fact that a dwarf from one of the pigmy tribes of inner Africa was brought to the court during his reign and for his enjoying the longest rule yet recorded in history, a period of over 90 years. After his death the Old Kingdom came to an end. Remarkable tombs and inscriptions dating from the sixth dynasty are found from Tanis, in the Delta, to the first cataract at Aswân, and along the Valley of Hammamat from the Nile to the Red Sea.

The Old Kingdom witnessed the growth of an enlightened and highly developed state with an extensive code of laws; the highest achievement in plastic art; the creation of the column and the colonnade in architecture; the building of the earliest seagoing ships and the exploration of unknown waters; the pushing of commercial enterprises far into inner Africa; and the unfolding of religion to the extent that there was some belief in a judgment in the hereafter and a recognition of the possibility that happiness in the future life depended on actions in the present. Glassmaking—growing out of the glazes used for beads, jewelry, or the surfacing of brick—seems to have been discovered in Egypt during the early dynasties and to have spread from there to Syria and the Euphrates, thence into Europe and later to China where, as glass beads, it first brought prices equivalent to those paid for gems.

In the final years of the reign of Pepi II the power of the landed nobles became so great that there was a progressive deterioration of the state, and after his death it dissolved into a series of petty principalities. The political situation reverted to conditions similar to those existing in Predynastic times before the rise of the Upper and Lower Kingdoms. A period of civil wars and destruction set in. Temples were pillaged and violated, works of art were subjected to systematic vandalism, and the magnificent mortuary monuments of the old monarchs were not only mutilated, but in many cases were actually obliterated. The nation was totally disorganized, and from the beginning of the seventh dynasty to the end of the eleventh the history of Egypt is almost a blank.

### THE MIDDLE KINGDOM

Eventually a strong man rose above the throng of feudal barons, and through his efforts the rights and privileges attained by these powerful nobles were properly adjusted and subjected to a centralized authority. This man, Amenemhet I, founded the twelfth dynasty and built his capital at Thebes, near modern Luxor, some 440 miles above Memphis. By the end of his reign he had brought the Middle Kingdom into being and was able to contemplate a nation under centralized and uniform control. As a result his successors ruled the country for over 200 years. During this dynasty Egypt probably enjoyed the most bountiful and widespread prosperity in its history. The frontiers were stabilized; campaigns were resumed in Nubia and carried beyond the second cataract of the Nile and into the land of Kush; the gold country east of Coptos, between the Nile and the Red Sea, was exploited; Syria was invaded; the mines of Sinai were reopened; a large reservoir was constructed in Sinai; a great wall was erected around the ancient capital of Nekheb or El Kab; temples were built; and an extensive project for irrigation was carried out with brilliant success in Lower Egypt. It was at this time that control over the inflow and outflow of the flood waters of the Nile was established in the Fayum basin, and some 27,000 acres of land were reclaimed to agriculture. The enormous works constructed there, including a wall some 27 miles long, were responsible for the belief recorded by the historian Strabo that the famed Lake Moeris thus produced was wholly an artificial body of water.

Distinct impetus, through royal sponsorship, was given to the arts and crafts, and numbers of skilled artisans were developed throughout the country. The beauty and workmanship exhibited by the magnificent jewelry of the royal house were rarely surpassed by the later goldsmiths of Europe. A uniform system of writing was developed and consistently followed by the scribes of this period, and there is the first definite evidence for a literature of entertainment. There were folk tales, stories that were prototypes of the saga of Sinbad the Sailor, philosophizing treatises, and compositions of prophecy. Most of these were written in such poetic language that it is difficult to distinguish prose from poetry, but in spite of the many artificialities this literature actually must be regarded as classic.

#### THE HYKSOS OR SHEPHERD KINGS

The prosperity of the land survived briefly in the opening years of the thirteenth dynasty, but rapid dissolution set in and another dark age

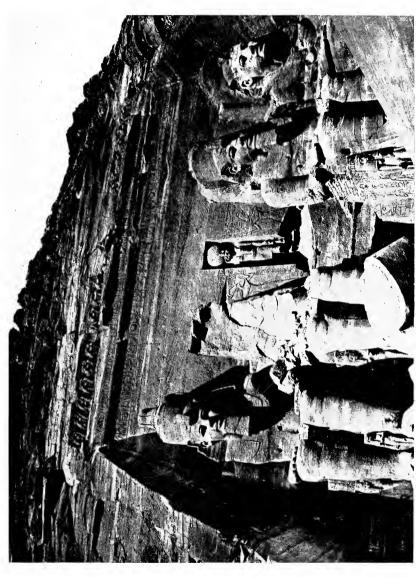


QUEEN HATSHEPSUT OF THE EIGHTEENTH DYNASTY, THE METROPOLITAN MUSEUM OF ART



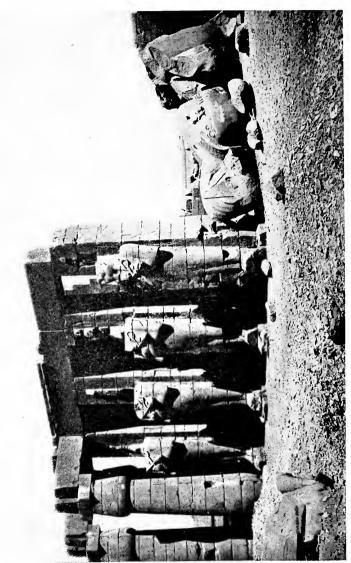
HEADS OF FOUR PHARAOHS FROM THEIR MUMMIES IN THE EGYPTIAN MUSEUM AT CAIRO

Of the eighteenth dynasty: *a,* Thutmose III; *b,* Thutmose IV. Of the nineteenth dynasty: *c,* Seti I; *d,* Rameses II.



TEMPLE TO THE RISING SUN AT ABU-SIMBEL

Figures of Rameses II on either side of doorway. Female figures represent queens and princesses. Man squatting on foot of statue at left indicates the colossal size of these figures.



PORTION OF THE RAMESSEUM, MORTUARY TEMPLE OF RAMESES II. AT THEBES

followed. Lasting until the beginning of the eighteenth dynasty, the era is mainly characterized by an invasion of the Delta, in the seventeenth century B. C., by peoples from Asia. These were the Hyksos or Shepherd Kings about whom so little is known that there is still considerable question as to their nationality. They overthrew the reigning dynasty in Lower Egypt, took Memphis by assault, and established themselves at Avaris, later called Tanis. They exacted tribute from Upper Egypt, and their influence is apparent in subsequent fundamental changes in the country. They introduced the horse and war chariot to the Nile Valley—wheeled vehicles seem to have been lacking previously—and taught the Egyptians warfare on a large scale.

The invaders attempted to substitute the worship of Set, a form of the Syrian Baal, for the Egyptian Re, destroyed some of the temples, and performed other barbarities that so aroused the ire of the rulers in Upper Egypt that they joined forces and finally, under Ahmose I, the King of Thebes, drove the foreigners from the country, even forced them north of Sharuhen in Palestine. On his return to Egypt Ahmose set out to reconquer the Nubians, who had taken advantage of the period of disorganization to escape from Egyptian domination. After retaking the territory between the first and second cataracts he turned his attention to overcoming the nobles who were opposed to him. In this he was successful, and the lands that had formed their hereditary possessions were confiscated. They became the property of the crown, remaining so permanently, and all Egypt thus was transformed into the personal estate of the ruler.

### THE NEW EMPIRE

## FIRST PERIOD OF THE EMPIRE

Under Ahmose I the eighteenth dynasty and the New Empire got under way. Because he was at the head of a strong army, hardened and well trained by the long campaigns against the Hyksos, Ahmose set up a military state. Having learned of the wealth to be taken in Asia and being thoroughly versed in the art of war, the formerly peaceful Egyptians were stirred by a lust for conquest that was to last for centuries. The middle classes, attracted by the rewards, wealth, and prestige open to the professional soldier, swarmed into the army. The survivors of the old class of nobles made careers of the profession of arms, and the sons of the Pharaohs became generals in the army instead of administrative officials as in the days of the Old Kingdom. For a century and a half the story of

Egypt is that of the army and its achievements. For the first time there was a standing army organized into two grand divisions, one in Upper Egypt and one in the Delta. Tactics and the proper disposition of forces became a definite study. The problems of a center, wings, defined battle lines, and flank movements were recognized, and plans were made to solve them. The art of the siege was carefully developed. The division became an essential component of an army, and war chariots assumed a prominent role. The warriors rode to battle in horse-drawn vehicles and a form of "mechanized" warfare came into its own, but cavalry as known in modern history was not employed.

During the reign of Ahmose I and some of his successors, especially Amenhotep I, Thutmose I, Thutmose III, Amenhotep II, and Thutmose IV, the country was made strong and productive and its power was extended in all directions. Tribute poured into the royal treasury from Nubia, from the Somali coast, the oases of the western desert, the coast of Libya, Palestine-Syria (the petty kingdoms of the Arameans and the Canaanites), from Phoenicia, Babylon, and the Mitanni. The wall between Asia and Africa was broken down and the wealth of trade that formerly flowed along the Euphrates to Babylon was diverted to the Nile Delta. Richly laden galleys of the Phoenicians brought merchandise from the industrial settlements of the Aegean and carried away the products of Egypt, taking them to various ports of the eastern Mediterranean and southern Europe. Long caravans bearing rich materials from Syria, spices and aromatic woods from the East crossed the Isthmus of Suez, while other caravans carried goods, brought by the Red Sea fleet, from the coast to the Nile Valley. Accompanying this activity was the spread of Egyptian influence. In the northern Mediterranean Crete adopted Egyptian religious forms, and the artists of Mycenae based their work on Egyptian motifs.

The greatest of the eighteenth dynasty Pharaohs was Thutmose III. It was under him that Egypt reached its zenith. His reign not only marks an epoch in his own country but in the entire East as known in his day as well. Rising from an obscure priestly office to that of the ruler of the kingdom, through his own efforts and strength of character, he forged the first real empire and has been called the first world hero. The early stages of his career were not altogether promising, and the fact that he overcame what might well have been a serious setback demonstrates the quality of his abilities. He was the son of Thutmose II and a lowly concubine in the royal harem. Being a prince with no prospects

and no rights of succession he was placed in one of the temples to be trained as a priest. While he was still a boy his father died. There being no male heir in the direct line it was necessary to provide for the succession and the Royal Queen, Hatshepsut, chose the young Thutmose to be the husband of her oldest daughter, his half-sister Neferure. In accordance with tradition he thus became the Pharaoh but because both he and his consort still were children his stepmother mother-in-law, by right and custom, continued to rule as Queen Regent.

At the beginning of the regency the affairs of state were conducted according to precedent. Being young and very attractive, however, Hatshepsut gathered a coterie of her contemporaries around her and began replacing the older officials. Included in this new group was one Senmut, a steward of Amon and a man of little-known antecedents, who was made guardian of her oldest daughter, the royal consort, and high steward of the Queen's own household. He was an ambitious and aggressive administrator and once in the favor of Hatshepsut gained office after office until his power probably was second only to that of the Queen herself. Whether it was her idea or at the urging of Senmut is not known, but during the seventh year of the regency Hatshepsut usurped the throne and proclaimed herself "King over Upper and Lower Egypt." Thutmose was relegated to a position in one of the temples, while Hatshepsut proceeded to develop the country. She sent an expedition to the Land of Punt-the Somali coast at the south end of the Red Sea-reopened the copper mines in Sinai, built numerous new temples and monuments, and restored many of those that still showed the effects of the Hyksos invasion. From these works she became known as the first great woman in history.

In the meantime Thutmose had reached young manhood, unquestionably embittered by the treatment he had received and filled with plans for the future. His royal consort had passed away and he had married her younger sister Meryetre, thus retaining his right to the succession. Senmut no doubt lost much of his power with the death of his royal ward and in about the eleventh year following the usurpation of the throne he met his end, probably at the hands of Thutmose or some of his associates. Many of Senmut's works were destroyed, his likeness was obliterated on the sculptures in the almost regal tomb that he had built for himself but never was to occupy, and his name was erased from many monuments. Other supporters of the throne seem to have been removed, one by one, and Thutmose and his adherents were rapidly gaining in power when some time between the twenty-first and twenty-second years after she first began to rule as the Queen Regent, Hatshepsut died.

Thutmose III now came into his own and not only made good his claim to the throne but ruled for some 30 years as one of Egypt's outstanding Pharaohs. After some 20 years of semiobscurity he emerged as a versatile man of tireless energy, an able administrator, a soldier, and an artist. He improved the internal conditions of the country, reorganized the army and set out for Asia. In 17 campaigns over a period of 19 years he completely subdued the Syro-Palestinian area and established Egyptian sovereignty in Asia on a permanent basis. He extended the dominions in Nubia almost as far south as the fourth cataract of the Nile, strengthened the hold on the Libyan coast and the oases of the western desert. Tribute poured in from all directions and the empire was at its peak. During his reign large numbers of slaves, mostly of Semitic race, were brought to Egypt from the Syro-Palestinian area. The practice was continued by subsequent rulers, and the resultant intermarriage between them and the Egyptians infused new blood that began to be noticeable in a composite type of face depicted by the artists.

Egypt's dominance was maintained until the time of Amenhotep III, the great-grandson of Thutmose III and the last of the great emperors, when her power began to wane. At the time of Amenhotep's death the Empire was in dire need of a strong and practical ruler, but his son and successor, who temporarily became Amenhotep IV, was young, inexperienced, and completely under the domination of his mother, his Asiatic Queen, and a favorite priest.

The new Pharaoh was a dreamer, a man of unprecedented greatness in the realm of ideas, yet one who completely failed to comprehend the needs of the Empire. Instead of putting an end to growing dissension between local factions and sending an army to stem the rising forces of revolt in the Asiatic kingdoms and tributary states, he turned his attention to philosophizing and a contemplation of theology. In his meditation he grasped the idea of a universal being who was the creator of all nature, one who exercised fatherly care over all men alike. This probably was the first time in history that such a conception was attained. As a result there was a religious revolution, and by royal edict all the old gods were replaced by one supreme being named Aton. Cities were founded in Asia, Nubia, and Egypt in honor of this new god. The holy city in Egypt was erected on a plain bounded on the west by the Nile and on the other three sides by the valley escarpment. It was located midway between Thebes and Memphis at the place now called Tell-el-Amarna. The city was named Akhetaton, the "Horizon

of Aton," and there the Pharaoh moved his court. In the meantime he had changed his own name from Amenhotep to Ikhnaton or Akhenaton, the "Spirit of Aton." Throughout the length and breadth of the land he had the word "gods" and the name "Amon" obliterated. Not even the tomb and monuments of his father escaped this mutilation. The old temples restored after the dark days of the Hyksos and those built by preceding rulers of his own dynasty were neglected and allowed to fall into ruin while new ones were erected to Aton. At every point he offended the cherished traditions of a whole people and engendered hatred among the military and priestly classes, who not only objected to his teachings but were dismayed by his neglect and loss of the Asiatic empire, his failure to take steps against the increasing power of the Hittites in northern Syria. Whereas Thutmose III has been called the first world hero, in the sense of an Alexander or a Napoleon, Ikhnaton may well be considered as the first idealist and the first to stand out as an individual. He undoubtedly was the most remarkable person in early oriental history. He had the audacity to break with tradition and to disseminate ideas that were so far in advance of his age that his subjects were incapable of understanding them. His teachings and writings seem more in keeping with the times of Christ than of a period some 1,400 years earlier. They certainly were not appreciated throughout most of Egypt, and the new religion created little enthusiasm beyond the restricted circle of the royal family and the court. It unquestionably gained no lasting hold on the masses.

Accompanying the religious revolution was an equally marked change in the world of art. Realistic representations replaced the traditional conventionalized forms. Artists and sculptors were taught to reproduce what they actually saw. Consequently the completed works were simpler and more beautiful than any that had been done before. Animals were shown in characteristic postures, and human figures were modeled in so lifelike a manner that they suggest the excellence of the best Greek art of a later day. For the first time complex compositions of figures in the round were conceived and skillfully executed. In addition fine colored glasses and fayence were manufactured at the capital city, and the jewelers produced lovely ornaments for personal wear.

Ikhnaton had no sons, and in the closing days of his reign he designated the husband of his eldest daughter, a man named Sakare or Smenkhara, as his successor. Sakare served for a time as coregent, but there is some question as to whether or not he actually survived his father-in-law. If he did, his reign was very brief because another son-

in-law almost immediately appears as Pharaoh. This ruler's greatest claim to fame lies in the world-wide publicity resulting from the discovery of his tomb by Lord Carnarvon and Howard Carter in November 1922, and the subsequent revelation of the wealth and splendor of his mortuary furniture. The skill and artistry of the times is convincingly illustrated by these magnificent specimens. Tutenkhaton was a mere boy when he ascended the throne. For a short time he continued the court at Akhetaton and then transferred the capital back to Thebes where he came under the domination of the priests of Amon. This led to a resumption of Amon worship, and in recognition of the old god's return to favor the young Pharaoh changed his name to Tutenkhamon or Tutankhamen, the one by which he is best known today. In addition he began the restoration of the name "Amon" on the monuments from which it had been removed by his father-in-law.

Tutenkhamon's reign was brief, probably lasting only 6 or 7 years, and at the time of his death he was a youth of no more than 18 years. He is mainly noted for his weakness and for the fact that in his tomb there was disclosed for the first time to modern men the undisturbed burial chamber of an ancient Egyptian king. From it came a revelation of the wealth and luxury of the most magnificent period of Egyptian history. In view of his insignificant status, the imagination is awed by thoughts of what the funerary equipment of some of the famous and long-lived Pharaohs must have been. The treasures buried with Thutmose III or Amenhotep III probably were so much greater that they would seem fabulous in comparison. Following Tutenkhamon's death, his widow, a girl of 15 or 16, endeavored to retain her royal position through the medium of obtaining a Hittite prince for her husband and, in keeping with the Egyptian custom, having him placed on the throne.3 Before this could be accomplished, however, Ikhnaton's former chief priest and court chamberlain Ay, who probably had been the power behind Tutenkhamon, was recognized as Pharaoh. He lived only a short time and was followed by one or two other pretenders whose reigns at best were transitory. The state again was experiencing dark days.

<sup>&</sup>lt;sup>3</sup> A new Pharaoh could not be crowned until the old and deceased ruler had been entombed, and as the process of embalmment took between 2 and 3 months the period usually was one of considerable political conniving. Contrary to a wide-spread misconception, the Egyptian method of embalming is not a lost art, and under comparable conditions of a hot, dry climate the work of modern morticians would endure longer and with better results. Attempts to preserve the body were an outgrowth of the Egyptian belief in life after death and that the soul should be able to revisit its former habitat whenever it so desired.

Anarchy prevailed, marauding bands plundered Thebes, and the royal tombs were desecrated and stripped of their rich furnishings. In this inglorious fashion the dynasty that had driven the Hyksos out of Egypt and that had established the greatest empire that the East had ever seen came to an end.

## SECOND PERIOD OF THE EMPIRE

Out of the chaos another strong man emerged, and Haremhab gained the throne. He is often listed as the final Pharaoh of the eighteenth dynasty, but so far as is known he was not of royal blood nor in any way related to the preceding line of kings. He had been an able administrator and skillful organizer under Ikhnaton, had served with distinction under Tutenkhamon, and during the rapid succession of weak kings following the death of the latter had become commander-in-chief of the army and chief councilor at the royal court. Having gained the support of the army and the priests of Amon, he had but to proceed to Thebes to be declared the ruling Pharaoh. To make the accession legal, however, he married the sister of Ihknaton's Queen who, although advanced in years, was a princess of the royal line and a high priestess of Amon. Haremhab continued the work bearing on the restoration of the worship of Amon and devoted all his energies to reorganizing and strengthening the internal affairs of the country. In so doing he showed a concern over conditions among the masses of the people and worked for their betterment in a way rarely equaled from that day to this. Although he sent some military expeditions into adjacent lands, he had little opportunity to attempt the reconquest of lost territories. The revitalized nation that he left, however, made possible the vigorous rule of the powerful Pharaohs of the nineteenth dynasty.

Haremhab apparently did not establish a dynasty, although he initiated the second period of the Empire, and was succeeded by Rameses I, who was not closely related to him. The new Pharaoh was advanced in age and ruled only 2 years, but he did found the nineteenth dynasty. During the last year of his reign his son, Seti I, served as coregent and upon the death of the father immediately took aggressive control of the affairs of state. Under his leadership the Bedawins were driven from Palestine, the water route between Syria and Egypt was restored, tribute was exacted from the Phoenicians, the Libyans were forced from the western Delta, a treaty of peace was made with the Hittites, and an unprecedented era of temple building was started. The 20 years that

Seti was on the throne witnessed a marked revival in Egyptian power. At his death a younger son staged a successful coup and seized the throne. This ambitious young man, Rameses II, exploited new mines in Nubia to replenish the royal treasury and set out to recover the remainder of the great Asiatic empire that had been conquered by his powerful predecessors of the eighteenth dynasty.

Hard campaigning in Asia over a period of 15 or 16 years brought Palestine and parts of western Galilee again under Egyptian domination, but Rameses was unable to gain a decisive victory over the Hittites. The final outcome was a treaty of peace and alliance between the two countries, a compact that was made more binding through the marriage of Rameses and one of the Hittite princesses. The Asiatic campaigns were a severe drain on Egypt, however, and its military aggressiveness was exhausted. Never again did it approach its former strength or driving power. Although occasional expeditions were needed to subdue revolts in Nubia and other adjacent areas, the army now became a weapon of defense. In order to be nearer to the scenes of conflict in the course of the Asiatic fighting, Rameses moved his court to the Delta, where he founded a residence city, Per-Rameses. The religious center of the state remained at Thebes, but the Pharaoh's continued presence in the Delta led to a growth and prosperity previously unknown to the cities located there.

Following the establishment of peace with the Hittites, Rameses directed his energies toward the erection of temples, buildings and obelisks, and colossal statues of himself. He not only paid tribute to his own prowess in this fashion, but even went further and had his own name inscribed on an almost countless number of monuments commemorating his ancestors. All this called for a tremendous expenditure of wealth and a vast supply of slave labor. Much of the latter was obtained from Palestine and some of the Hebrew traditions of bondage in Egypt stem from that period. With the importation of rare and delicate foods, merchandise, horses, cattle, and luxury items from Asia, the presence of large numbers of Phoenician and other foreign merchants, and the many Semitic and other Asiatic slaves on every hand the cultural features of the country took on a decided Asiatic aspect. This is clearly shown in the art of the period and in the appearance of Semitic words and idioms in the literature. Furthermore, many foreigners of Semitic derivation found favor and obtained high positions at the court, in the government, and in the army. The latter tended more and more to be made up of mercenaries, Libyans, Nubians,

Negroes from the Sudan, and eastern Mediterraneans, a factor which ultimately was to prove disastrous to the ruling house.

Rameses II ruled for 67 years, and with advancing age his energy and vigilance diminished to such an extent that Egypt's enemies were encroaching on all sides. At the time of his death the country was again in need of a youthful and aggressive Pharaoh, but he was succeeded by his son Merneptah, who by that time was approaching old age. Throughout the first 5 years of his reign he fought many battles in an effort to preserve the Empire. He subdued widespread revolts in Asia and beat back an attempted invasion of the western Delta by the Libvans, yet lacked the power to attempt an extension of the Empire. The concluding 5 years of his rule found conditions peaceful in the north, but he was forced to put down one of the periodic rebellions in Nubia. Before his death he followed the example of his father and appropriated the monuments of his ancestors to his own use. The material for his mortuary temple was quarried from that of Amenhotep III and his name was carved on countless other monuments, even those of his own father. It is interesting to note that the first known reference to Israel appears on the back of a stela appropriated from Amenhotep III and incorporated, with its original inscription concealed, in Merneptah's temple. Contrary to tradition, however, he was not the Pharaoh of the Hebrew exodus and was not drowned in the Red Sea.

The regime of the "two old men," Rameses II in his later days and Merneptah, was so lax as far as internal affairs were concerned that rival factions grew apace and intrigue and conspiracy were rampant, Merneptah's death started a struggle for the throne that lasted for many years. He was followed in quick succession by a series of obscure rulers who did little beyond hastening the decline of the Empire. The country fell into the hands of the local nobles, petty chiefs, and rulers of the towns. It was rapidly dissolving into the heterogeneity of petty kingdoms and city states from which it originally developed when famine swept the land. Taking advantage of the situation, one of the Syrians who had been an official at the court seized the throne and proceeded to rule by tyranny and violence. He plundered the possessions of all men and seized the revenues of the temples. The Libyans, seeing what conditions were, moved into the western part of the Delta, raided towns and villages from Memphis to the Mediterranean, and settled on the choice fields on both sides of the western branch of the Nile.

The Syrian usurper had ruled about 5 years when another strong man came to the fore. He was Setnekht, probably a descendant of the old line of Seti I and Rameses II. Having gained the throne, he restored order, organized the state, and returned their revenues to the temples. He lived only a short time after becoming Pharaoh but before his death named his son, Rameses, as his successor and thus founded the twentieth dynasty. Rameses III was young and vigorous and proceeded to revive the glories of the Empire. He drove the Libyans out of the Delta; defeated their allies, the "peoples of the sea," who had been plundering the coast and the towns of the Delta; met, defeated, and subjugated the Philistines who were advancing through Syria toward Palestine, again saving the portions of the Empire in Asia; and repulsed another attempted invasion from Libya. As a result of his vigorous handling of affairs the country enjoyed peace during the later years of his reign. He was not a great ruler, however, as he was motivated by an imitating rather than an originating spirit, and it is quite obvious that he had chosen Rameses II as his model. This was unfortunate as he continued the former policy of pouring wealth into the treasuries of the temples and did not take a definite stand against the priesthood which was becoming an actual economic and political menace to the Empire. So much wealth was required for the temples that at times poor workmen employed by the state were forced to go without food while the storehouses of the gods were filled to overflowing.

To offset the grasping tendencies of the priesthood, Rameses ultimately was forced to rely on the foreigners among the royal slaves. To make their support more effective they were placed in the army which, as previously mentioned, was already largely composed of mercenaries. In addition he also was compelled to employ foreign slaves as a personal bodyguard. Most of these were from Syria, Libya, and Asia Minor. They made themselves so indispensable that many of them, particularly the Syrians, attained high posts and important positions, in the government and at the court, despite their slave status. This condition was far from satisfactory as it kept the ruler continually playing one group against another, while the loyalties of all depended for the most part on the extent of the royal largess. The result was an unsuccessful revolt by the vizier and his followers and a later plot against the Pharaoh's life, fomented in the royal harem and abetted by some of the officials of foreign birth. This was discovered in time to save Rameses' life and to check the attempt to put a minor son on the throne, but the shock caused by this treachery and the strain of the subsequent trials of the conspirators proved too much for the old Pharaoh, and soon after celebrating the thirty-second anniversary of his accession he died.

Following the death of Rameses III, nine Pharaohs bearing the same once great name ruled with increasing weakness and a corresponding decadence in the affairs of state. The span of about 80 years during which they reigned is characterized by the priesthood's assumption of royal power and the development of a sacerdotal principality at Thebes; by a complete loss of prestige abroad; and by an unprecedented orgy of desecration and robbing of royal tombs. Disunion and division between Upper and Lower Egypt, as well as the downfall of the Empire, resulted from the establishment of independent theocratic rule at Thebes. For brief periods the country was under the domination of a single individual, but for the greater part of four and one-half subsequent centuries there was little unity throughout the whole of Egypt.

The twentieth dynasty came to an end with the death of Rameses XII. He was succeeded at Thebes by the High Priest of Amon, while in the Delta a separate regime took over at Tanis. The Tanite kings constituted the twenty-first dynasty and reigned for about 150 years. They maintained varying degrees of control over the principality at Thebes, but the era seems to have been one of continual industrial and economic decline. The Libyans began a peaceful infiltration of the western Delta, gradually spread eastward, became prosperous, attained positions of power and influence, and finally, with the cooperation of the Libyan mercenaries in the army, seized the royal authority. The man who made himself Pharaoh was the commander of the mercenary troops at Heracleopolis, located just south of the Fayum. He established his capital at Bubastis and founded the twenty-second dynasty, which he made legitimate through the marriage of his son to a daughter of the last of the twenty-first dynasty Pharaohs.

#### THE LIBYAN DYNASTY

The state set up by this soldier and foreigner, who became Sheshonk I, had three divisions. In the Delta there was an essentially feudal organization with the cities and towns under the rule of princes and chiefs, the Meshwesh, who paid tribute and contributed their quotas of troops to the Pharaoh. Two principalities were formed in Upper Egypt. One was that of Heracleopolis, already under direct control, comprising the area from Memphis as far south as Siut, about midway between

Thebes and Ikhnaton's old capital at Tell-el-Amarna. The other was the principality of Thebes. It extended from Siut to the first cataract of the Nile and probably included northern Nubia as well. Under a strong man this threefold division was satisfactory, but it was a potential source of trouble that was to be fully realized at a later date.

In the early days of the twenty-second dynasty Egyptian troops, mercenaries however, penetrated Asia for the first time in over 270 years. They went as far north as the Sea of Galilee and east to the Jordan, bringing Palestine again under control and replenishing the longdepleted royal treasury with loot from numerous towns and cities. Included in this was the wealth that had been accumulated at Jerusalem by King Solomon. Nubia was again forced into line and resumed paying tribute. After a lapse of over 200 years the building of temples and other large structures was started and for a long time the glories of the Egypt of the nineteenth dynasty were restored. The ruling family became almost completely Egyptianized. They worshiped the Egyptian gods and made enormous contributions of gold, silver, and land to the temples. Under later Pharaohs of this dynasty conditions were not altogether tranquil. The feudal lords in the Delta remained Libvan barbarians and not only were continually quarreling among themselves but frequently were at odds with the Pharaoh. The people, growing restive under their oppression and excessive taxation, often imposed by more than one lord, rose in revolt time and again only to be put down in sanguinary fashion by the mercenaries. The principality of Thebes sporadically showed signs of independence and eventually staged a rebellion that brought on civil war between Thebes and Heracleopolis. This struggle was protracted, and it was years before peace was established. In the meantime many lords of the Delta had thrown off all allegiance to the ruling house. The last three Pharaohs of the twenty-second dynasty held Upper Egypt but probably exercised little control over the Delta. They were responsible, however, for a disgraceful destruction of ancient monuments, even to the breaking up of the huge colossus of Rameses II at Tanis, and the loss of all influence in Palestine.

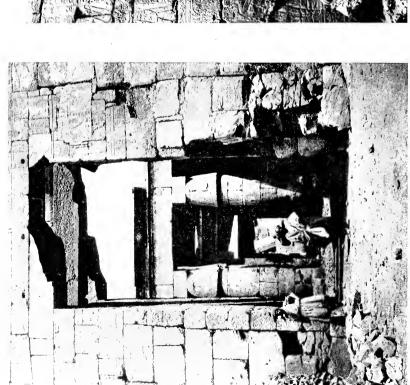
At the death of Sheshonk IV, the last of the Bubastite rulers, one of the Delta lords had gained sufficient power to seize the throne and found the twenty-third dynasty. The latter lasted only about 27 years and was mainly characterized by unsettled conditions and the sharing of authority between the ruling house and the minor kings in the Delta who could not be held in subjection. The most important of these



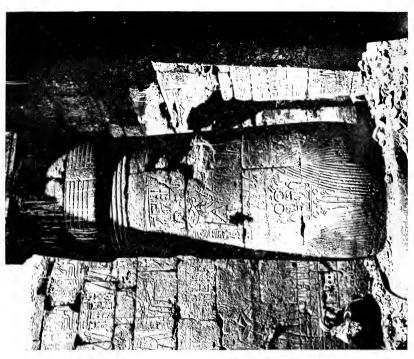
1. PORTION OF THE TEMPLE AT KARNAK



2. REMAINS OF AMENHOTEP III'S TEMPLE AT LUXOR



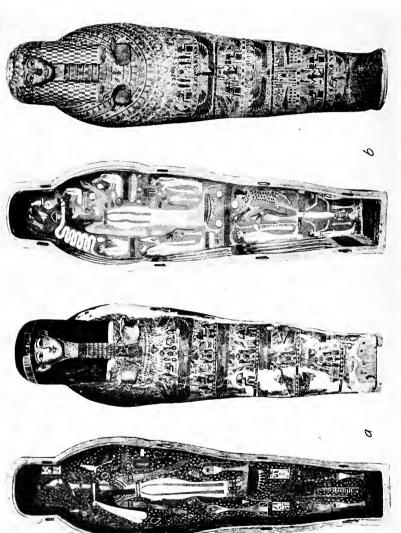
1. DOORWAY INTO COLONNADE OF TEMPLE AT KARNAK



2. DETAIL OF PILLAR IN TEMPLE AT KARNAK



ISIS, THE MOON GODDESS, AND AMON, THE GOD OF THEBES.
OR AMON-RE, A SUN GOD



## COFFINS OF THE TWENTY-FIRST DYNASTY

From a gallery at Thebes, where they were placed as a precaution against tomb robbers by Pesibkhenno II, the last of the Tanite kings. The interiors (a, and b, left) are decorated with pictures of various gods and ceremonial symbols. These coffins were presented to the United States National Museum by the Egyptian Government.

was Tefnakte, who set up a kingdom of Lower Egypt, took the title of Pharaoh, and reigned concurrently with the last years of the twenty-third dynasty. His capital was at Sais in the western Delta. Eventually almost every city in the Delta had its own petty king or independent lord. The struggles and feuds between these minor rulers culminated in the complete dissolution of the state, and Egypt once again became a country of small political units. While this was transpiring, the Assyrians took advantage of the situation and moved down through western Palestine to the Egyptian frontier. The hard-pressed Hebrews looked in vain for help from the land which formerly ruled them. The Delta kings were too engrossed in their own quarrels to realize the danger inherent in this situation, but the Assyrians for some reason did not press an invasion.

During these trying times when there was no foreign commerce, when industry and agriculture were in dire straits, and when the resources of the country were rapidly being exhausted by the insatiable greed of the petty kings, a new era in art was developing. The sculptors were showing a creative vitality and a freedom of style that was to culminate during the period of The Restoration in some of the finest works of Oriental art.

The state of affairs in the south was also bad. Throughout the latter part of the twenty-second dynasty the disturbances in the Delta and Upper Egypt so occupied the attention of all concerned that Nubia was ignored and practically forgotten. As a consequence, at about the time the twenty-third dynasty came into power, a fully developed Nubian kingdom patterned after the theocracy at Thebes, possibly fostered by exiles from that city, had become established there. As this kingdom grew in strength, it expanded northward. In the closing days of the twenty-third dynasty it had taken over Upper Egypt as far north as Heracleopolis. As conditions in the Delta grew worse the invasion continued. Memphis was seized, and the rulers in the Delta were forced into temporary submission and the payment of tribute to the Nubians. The latter soon withdrew to Thebes, however, and after a brief period during which they controlled the area as far north as Heracleopolis they returned to their domain in the south.

### THE ETHIOPIAN DYNASTY

Following the withdrawal of the Nubians a son of Tefnakte, having gained ascendancy over the ruling house, came into power and mounted the throne of Lower Egypt. This man, Bocchoris, founded and as far

as is known was the only King of the twenty-fourth dynasty. In an effort to form a buffer between Egypt and Assyria he, in conjunction with some of the independent lords of the Delta, induced some of the Syro-Palestinian states to revolt. The armies of these allies, including some Egyptian mercenaries, were defeated. Possibly because they remembered her former might, the Assyrians under Sargon II did not continue on and attempt an invasion of Egypt. Bocchoris had reigned for about 6 years when the Nubians again invaded the country. This time they not only took Upper Egypt but completely subjugated the Delta as well. Bocchoris is reputed to have been captured and burned alive. The Nubian leader Shabaka became the new ruler of Egypt and the founder of the twenty-fifth or, as it is often called, the Ethiopian dynasty.

Shabaka realized the danger of the growing power of Assyria and, as Bocchoris had done before, sent "tourists" to the Syro-Palestinian states for the purpose of inciting revolts. Growing out of this was an alliance between Egypt, Tyre, Judah, Moab, Edom, Ammon, and the neighboring Bedawins. The Assyrians under Sennacherib set out to quell this uprising. They swept down the Phoenician coast, capturing all but Tyre, subdued the Philistines, and finally came upon the allied forces led by Shabaka's nephew, Taharka, who later was to become King of Ethiopia. Needless to say, the motley troops of Taharka were no match for the well-equipped and finely organized Assyrians and were quickly defeated. Judah was laid waste and Jerusalem beseiged. but before that city could be taken Sennacherib's army was devastated by malaria, probably derived from the swamps of the eastern Delta. This forced a hasty retreat to Nineveh, and Jerusalem was saved. The outcome was equally fortunate for Egypt as for a third time a powerful Assyrian army had turned back from its border. Some agreement must have been reached after this denouement, as peace prevailed between Egypt and Assyria for about 30 years.

Shabaka completed his reign without disturbance. He restored temples, built new ones, and governed in the manner of a native Pharaoh. His successor, Shabataka, probably a son although the relationship is not clear, was not molested by the Assyrians but apparently was wholly incapable of coping with the petty local rulers and of uniting Egypt against the dark days ahead. He had been on the throne about 12 years when an army from Ethiopia invaded Egypt. These forces were led by Taharka, the commander of Shabaka's ill-starred effort against the Assyrians. They overwhelmed Egypt's defenders, killed the King, and

Taharka seized the throne. He was the son of a Nubian woman, and the portrait sculptures of him made by the artists of the day show that he possessed definite Negroid characteristics. He settled at Tanis and had his mother brought there from the old Nubian capital at Napata, just below the fourth cataract of the Nile, to take her place as the queen mother at his court. In the first half of his reign he erected buildings at Tanis, built monuments at Thebes, and took steps to prepare the country for the clash with Assyria that he recognized to be inevitable.

### THE ASSYRIAN CONQUEST

In the meantime Sennacherib had been murdered by his own sons, and one of them, Esarhaddon, had ascended the Assyrian throne. He determined on the conquest of the Nile and set out with an army for the eastern Delta. At the initial meeting of the Egyptian and Assyrian forces, about 673 B. C., the results of Taharka's efforts at preparedness were apparent and the battle went against Esarhaddon. Three years later, however, the Assyrians again returned, and this time the Egyptian army was defeated and scattered and Taharka fled to Upper Egypt. Lower Egypt was organized into an Assyrian dependency and the 20 or more petty rulers swore allegiance to Esarhaddon. This oath was only perfunctory, as they soon were plotting with Taharka, and upon the withdrawal of the Assyrian army he returned to the Delta and resumed his rule over Lower Egypt. The Assyrians were not long in taking steps to quell this rebellion and Taharka was again defeated and forced to retire southward. The Assyrians established themselves in the Delta but were unable to gain control over Upper Egypt where Taharka retained his authority, although he actually had returned to the Ethiopian capital at Napata. This place he proceeded to make a suitable royal residential city. Subsequently a son of Shabaka was made coregent and appointed to rule over Upper Egypt. About a year later Taharka died, and the coregent, Tanutamon, went to Napata and became the sole ruler of the kingdom.

As the result of a dream in which he saw himself ruler over both the North and the South, Tanutamon set out for Lower Egypt. Throughout Upper Egypt he was received with acclaim, but on approaching Memphis he was met by the Assyrian garrison and troops sent by some of the lords of the Delta. These he defeated, and Memphis fell to him. Despite the fact that he met with little armed resistance, the following invasion of the Delta was not successful and he returned to Memphis where he proclaimed himself Pharaoh of all Egypt. His

dream of glory was short-lived, however, as a great army sent from Nineveh soon drove him out of Memphis and pursued him as far south as Thebes, which the hard-bitten soldiery proceeded to sack and lay waste. The temples were looted and the riches of Egypt's once magnificent capital were carted away. From that time on the city declined and never again reached its former wealth and splendor. Tanutamon returned to Napata and the Ethiopian rule over Egypt was at an end.

### RESTORATION OF EGYPTIAN RULE

In the Delta the Assyrians installed the son of one of the stronger petty kings as ruler over Sais and Memphis and bolstered the authority of other independent lords by bringing in some of their own officials. There is some doubt about the status of Upper Egypt, but it appears to have been under the domination of a "Prince of Thebes" and "Governor of the South," one Mentemhet, who still remained from Taharka's regime. Psamtik, the King of Sais and Memphis, was a descendant of the Tefnakte who had established his own kingdom of Lower Egypt in the western Delta in the days of the twenty-third dynasty. Like his ancestor he was aggressive and wise in the ways of men and nations. Taking advantage of Assyria's troubles with Babylon and neighboring peoples, he ignored the resident Assyrian officials. With the help of mercenaries sent by the King of Lydia, in Asia Minor, he subdued his rivals in the Delta. He then moved on Upper Egypt where Taharka's "Prince of Thebes" received him as the Pharaoh. To make his authority legitimate and to gain control of the property of Amon, Psamtik had his daughter adopted by one of the sacerdotal princesses who was a sister of Taharka. The political power of the hierarchy at Thebes had been so completely shattered by the Ethiopians that it could offer no resistance. In this fashion the twentysixth dynasty was established.

By his suppression of the feudal lords and petty kings, the formation of a stable central government, and placing of the country on a sound economic basis, Psamtik I demonstrated himself to be one of Egypt's ablest rulers. As a result of his efforts a strong and prosperous nation once more began to emerge along the Nile. The army was reorganized. Greek, Carian, and Syrian mercenaries were brought in to strengthen the more or less ineffective forces composed mainly of Libyans and their Egyptianized relatives. The eastern and western borders of the Delta were secured against invasion, and a garrison to guard the south was established on Elephantine Island at the first cataract. The elabo-

rate irrigation systems that the feudal lords had permitted to deteriorate and fall into ruin were restored. Under the improved conditions industrial art flourished, and the products of the Egyptian craftsmen of that period were rarely equaled. The sculptors became artists in bronze, creating superb statues with elaborate inlays of silver and gold, and making hollow casts of considerable size. Much of the art work was patterned after that of the Old Kingdom, but it showed a character and style in its sinuous and sweeping lines that was distinctive. Temples and palaces were erected at Sais, the capital, making it a great and splendid city. Other temples were built at Athribis and Buto. Trade was revived with the northern Mediterranean peoples. Phoenician galleys once more filled the harbors, where the now numerous cargo ships of the Greeks were also welcomed. Semitic merchants swarmed over the Delta, and Greek merchants and artisans were permitted to settle in the western Delta and at Memphis. The influx of this large foreign element seems to have had little effect on the Egyptian people, although it did have a marked influence on the ruling house. The Greeks, however, derived much from Egypt as is shown by their adoption of technical processes and artistic forms originating along the Nile.

Psamtik endeavored to restore and rehabilitate the state as it existed in the days before the Empire. The worship of the Old Kingdom was revived, temples were restored, even the pyramids were repaired, old mortuary customs were resumed, and the priests once again came into prominence, although as a distinct and exclusive class and not as a political force. It was in the restoration of the old religion that the artists were put to copying the work of the Old Kingdom and this in large part is responsible for the era being designated "The Restoration." The revived religion, however, was mainly one of external forms and the observance of ceremonial usages rather than of actual belief. Many new animals came to be sacred, and sanctuaries were erected everywhere. One phase of this is illustrated by the elaborate worship of the Apis-bull and the great sepulcher provided at Memphis for the burial of such animals.

After internal conditions reached a satisfactory stage, Psamtik undertook to revive Egypt's old claims on the Syro-Palestinian area and reach a settlement with Assyria. He invaded Philistia and laid siege to the city of Ashdod, the modern Esdud, but he was thwarted by the southward sweep of Scythian peoples from the Black Sea area. These warriors overran Assyria and penetrated as far south as the Egyptian frontier where they were stopped, some say by the payment of a liberal

ransom while others are convinced that the strength of Psamtik's army was the deciding factor.

Psamtik reigned for 54 years, and during his regime Egypt was lifted from its decadence to a state of peaceful prosperity unknown in the 500 years that had elapsed since the death of Rameses III. He was succeeded by his son Necho. The latter, seizing the opportunity offered by the state of collapse in Assyria resulting from the Scythian raids, set out to accomplish what his father had been unable to do, to reestablish the Egyptian Empire in Asia. He built a two-sea navy, one fleet in the Red Sea and the other in the Mediterranean, and invaded Philistia. From there he pushed on through Judah—defeating Josiah's little force and causing the death of that ruler—and across Syria as far as the Euphrates. The Assyrians made no effort to stop him, but because he did not think his forces sufficient to take Nineveh he returned southward. He removed from the throne of Judah the son of Josiah who had succeeded him and put a younger brother in his place, taking the first as a prisoner to Egypt where he later died.

The new Asiatic empire was short-lived. Forming an alliance, the Medes and the Babylonians conquered Assyria and divided the territory formerly belonging to it. Syria fell to Babylon, and Nebuchadrezzar, son of the King of Babylon, was sent to recover it. Hearing of this, Necho moved his troops to the northern frontier on the Euphrates. The armies met at the battle of Charchemish, the Egyptians being defeated and retreating in haste to the Delta. Nebuchadrezzar was unable to capitalize on the rout of the Egyptian forces by an invasion of Egypt, as he was recalled to Babylon by the death of his father. But the treaty which he made with Necho stipulated that Egypt relinquish all her claims in Asia, and the Syro-Palestinian area thus became a dominion of Babylon.

Necho then turned his attention to internal affairs. He worked for a greater development of the country's commerce. He attempted to open a canal between the Red Sea and the eastern branch of the Nile, but after losing thousands of men and discovering that there was danger of flooding the Delta because of the apparent higher level of the Red Sea he abandoned the project. An exploring expedition of Phoenician mariners that he sent out to sail around Africa was successful, however, the mission being concluded within 3 years. After a reign of about 16 years he was succeeded by his son, who took the name of Psamtik II. The latter made no attempt to regain any of the Asiatic territory, and although he invaded Nubia, the results were not lasting.

During his 5-year reign relations with the Greeks were continued on the same friendly basis prevailing under his predecessors.

Apries, the Hophra of the Hebrews, followed his father and immediately undertook to regain some of the lost dominion in Asia. As earlier Pharaohs had done, he stirred revolt in Judah, took over Phoenicia, and gained control of part of Lebanon. In attempting to drive the Babylonian besiegers from Jerusalem the Egyptians again found they were no match for Nebuchadrezzar and were forced to withdraw. Jerusalem subsequently fell, the city being razed and the nation annihilated, but the Babylonians did not move against Egypt. Despite the collapse of the Asiatic effort the country was flourishing internally as it did in the days of Psamtik I. Yet all was not well, as trouble brewing in the army brought on a series of clashes involving Greek mercenaries and also the Greek settlement at Cyrene. These culminated in the forcing of Amasis, the court chamberlain, on Apries as coregent. In a later struggle between the two men and their adherents Apries was killed.

Amasis assumed the throne and seemingly bowed to public opinion by restricting the activities of the Greeks, although he actually was catering to them. He established a new Greek city in the western Delta and made it possible for them to continue enjoying many privileges. He also maintained close relations with the Greeks in Europe and Asia and was very popular with them both at home and abroad. At the same time he built additions to the temples at Sais and Memphis, and in other ways endeavored to retain the favor of the Egyptians. His liking for the Greeks was so apparent, though, that it created animosity among the upper classes, and when he subsequently was forced to draw on the wealth of the temples to support his extensive navy and large mercenary army, the priesthood was added to the party of malcontents. This group never attained sufficient strength to bring about any change in policy because Amasis cleverly kept full control of the situation, yet it created an undercurrent of unrest. Although a Pharaoh of Egypt, Amasis unquestionably belonged to and was a product of the Greek world.

### THE PERSIANS

When Amasis usurped the throne Nebuchadrezzar sent an army to the borders of the eastern Delta, probably with the intention of conquering Egypt. What actually occurred is not known beyond the fact that the country was not invaded and that the move did circumvent any attempt by Egypt to recover territory in the Syro-Palestinian area. Amasis was able, however, to conquer Cyprus and make it an Egyptian dependency. In the later part of his 44-year reign conditions again became critical in Asia. Cyrus, a Persian, rapidly rising to power, overthrew the Medes, the Lydians, and the Babylonians and was establishing a Persian empire in the valley of the Tigris and Euphrates in Asia Minor. Amasis could do nothing to stop the expansion of this new world power and at the time of his death must have had grim forebodings for the future. His son, Psamtik III, had been on the throne only a few months when the blow fell and Egypt became a Persian domain. From that time forward she no longer was to play an active part in the world to which she had contributed so much. As a matter of fact the old Egypt ceased to exist with the rise of the Saitic state and the twenty-sixth dynasty which now reached its end.

From 525 to 332 B. C., Egypt was mainly a Persian province. There were periods in which aroused national feeling was able to thrust off the conqueror's yoke, but they were brief. The twenty-seventh dynasty was Persian, although the rulers were successively forced to reduce the country to subjection. The twenty-eighth dynasty consisted of a line of Saitic kings. The twenty-ninth was able to maintain itself by means of an alliance with the Greeks, and the thirtieth, the last native Egyptian line, came to an end when the Persians forced the Pharaoh to flee into Ethiopia. From that time until the conquest of Alexander the Great, Egypt was definitely Persian. During the twenty-seventh dynasty the canal from the Nile to the Red Sea was completed and commerce flourished. Records of this era are none too plentiful, however, and there are very few monuments of the Persian period in Egypt.

### ALEXANDER THE GREAT AND THE PTOLEMIES

When Alexander invaded the country in 332 B. C., he met no opposition from the Persian governor and was welcomed as a deliverer by the Egyptians. He founded the city of Alexandria, which became the capital, visited Memphis, and made a pilgrimage to the oracle of Amon in the Oasis of Siwa. His show of respect for their religion pleased the native inhabitants. The reorganization of the local government under two officers already known to the people also reflected his good judgment. The treasure and tribute of Egypt were important to him at this stage in his career, however, so to assure the proper returns matters of taxation and finance were entrusted to Greeks. As a precautionary measure control of the army and navy was also placed in similar hands. These things accomplished, he left Egypt in 331 B. C., never to return in life. His remains ultimately were taken to Alexandria and entombed there.

Following the death of Alexander in Babylonia in 323 B. C., and the division of his dominions, Egypt fell to Ptolemy, and the Ptolemaic dynasty was founded. Under these rulers the state language, the government, and general philosophy became essentially Greek. Religion became a Graeco-Egyptian compromise whereby both could worship at the same temples. The court of the Ptolemies was made the center of learning and philosophy. The museum was built and the famed library of Alexandria founded. The country was heavily taxed to support the army and the navy and to provide for the great variety of lavish expenditures indulged in by the ruling class, but the whole system was carefully planned and worked so smoothly that there was little discontent among the common people. The upper classes were irked by foreign domination, however, and during the 18-year period from 204 to 186 B. C., fomented a great native revolt, and with the help of Ethiopia two native kings ruled in succession at Thebes. This uprising was finally quelled and Thebes was reduced to a series of small villages. The Ptolemaic dynasty came to an end with the death of Cleopatra, following the defeat of her navy under the command of Mark Antony at the battle of Actium, and in the year 30 B. C., Egypt became a Roman province, the personal domain of Augustus.

### THE ROMAN PERIOD

Romans were placed in the highest offices by Augustus, the natives of Upper Egypt were forced into submission, the neglected canals were cleared and repaired, and Egypt became the granary for Rome. An Ethiopian invasion was repelled and the capital at Napata was stormed. but no attempt was made to hold Ethiopia. The southern boundary of the Empire was established 70 miles above the first cataract. Nero's reign marked the beginning of an era of prosperity that lasted almost 100 years. Quarrels between the Greeks and the Jews starting with Augustus' granting of equal privileges to both groups culminated, in the reign of Trajan, in a great Jewish revolt, a massacre of the Greeks, and a subsequent virtual extermination of the Jews in Alexandria. From the time of Hadrian's visits, A. D. 130 and 134, foreign influence was made more apparent throughout the country by the erection of buildings in the Graeco-Roman style of architecture. Under Marcus Aurelius native troops revolted and were joined by the whole native population. Several years of fighting were necessary to suppress this uprising, and while the struggle was in progress agriculture suffered great harm. The rapid decline of the country under a burdensome taxation began at this time. Some years

after these troubles had been settled and while Severus was Emperor at Rome, the Christians in Egypt suffered the first of their many persecutions.

Under subsequent regimes conditions were unsettled, and the country began to experience invasions by predatory tribes located around its borders. The Blemmyes coming out of Nubia were particularly troublesome and for a long time were to prove a terror in Upper Egypt. Zenobia, the Queen of Palmyra in Asia Minor, after an initial unsuccessful attempt conquered Egypt and added it to her empire but soon lost them both to Aurelian in A. D. 273. Disturbed conditions continued, however, until Diocletian came to Egypt in 296 and reorganized the province. It was at this time that the well-known "Pompey's Pillar" was erected at Alexandria. Under Diocletian and his successor there was continued strife between the Christians and the pagans with active persecution of the former. Eventually the Christians became strong enough to overcome their adversaries and the pagan element was suppressed. At the time of the division of the Roman Empire, Egypt became a part of the Eastern Empire and before the latter fell had attained a position as one of the great patriarchates of the Christian church.

Egypt's decline under the Romans is largely attributable to the strictly military form of government established there and to the subsequent alliance between the officials and the Greek party at Alexandria. The latter actually did not represent the country and was a cause for dissension. The failure to protect outlying precincts from raids by their barbarian neighbors, ecclestiastical disputes occasionally reaching a stage of civil war, and jealousies in the administration produced a situation that resulted in the country's being held by force alone. The authority of the governor was only recognized where there were troops to enforce it. Things actually reached such a state that Chosroës was able to take Egypt in 616 and hold it as a Persian province until it was retrieved by the Romans in 626. There was no improvement in internal affairs following this episode, andthe decline continued. The people had no respect for or loyalty to a government that was interested solely in taxes and more taxes and consequently felt no obligation to support it when a new threat appeared in Asia Minor.

### THE MOSLEM CONQUEST

Moving down through the Syro-Palestinian area, an army of the Caliph Omar I invaded Egypt in 639. A second one followed in 640, and with the capture of Alexandria in 641 the feeble Roman efforts to hold the

country came to an end. A subsequent attempt by Constans II to recapture Alexandria was not successful, and a new era was under way. The native Christians welcomed the Arab conquest, but with it they ceased to be an Egyptian nation. Until 968 the country was a province of the Eastern Caliphate and was ruled by governors sent from the cities that at different times ranked as the capital of that part of the Moslem world. The era following the conquest was marked by oppression, corruption, rebellion, and bitter wars. There was a violent Coptic revolt in 725, with sporadic outbreaks continuing until 832 when they finally were crushed. Many of the Arab governors were able to establish quasi-independent dynasties. One of these was Ahmed ibn Tulun, who annexed Syria and founded the Tulunis dynasty that ruled from 868 to 905. It was renowned for its luxury and the fine buildings that it erected. The example set by Ahmed was followed by another governor, and the Ikhshidis dynasty, lasting from 935 to 969, was established. The latter came to an end when Egypt was conquered by the Fatimi caliphs, the heretical Shiah line, and was transferred to the Western Caliphate. This group founded modern Cairo in 969, built some of the principal mosques, and established El Azhar University. They continued in power until 1169 when they were deposed by Salâhed-din, the Kurd general commonly called Saladin.

Saladin fortified Cairo, built the citadel, waged war against the Crusaders, and captured the greater part of Syria and Mesopotamia. When the Crusaders under Jean de Brienne made an attack on Egypt and took Damietta at the mouth of the eastern branch of the Nile, Saladin's nephew El-Kamil led his forces against them and in 1221 successfully drove them from the country. El-Salih, the last of Saladin's line, introduced the bodyguard of white slaves called the Turkish Mamelukes and paved the way for further changes. Louis IX of France invaded Egypt in 1249 and through the treachery of native chieftains took Damietta in spite of the Sultan's efforts to protect it. El-Salih died shortly afterward and was followed by Turanshah, whose forces routed the French and captured their King the following spring.

### THE MAMELUKES

Turanshah aroused the enmity of the officials and was soon removed by El-Salih's Queen, Shajar al-durr. The latter assumed control of the state, but in deference to Moslem objections to a woman ruler she married the captain of the retainers and vested him with the supreme authority. This opened the way for a series of slave kings that ruled the country for 267 years (1250 to 1517). Gaining succession and continuing in office mainly by force of arms, they were characterized by their valor, their extravagant ways, their administrative ability, and their encouragement of the arts and literature. While they were in control, the mosque form of edifice was developed and perfected. The finest examples of Saracen architecture, monuments that still may be seen in Cairo, were erected by them. The constant revolutions, assassinations, usurpations of power, and incessant oppression of the masses prevailing throughout the time that they ruled, however, made Egypt a far from happy land. Huge sums were needed to maintain their luxurious courts, their numerous retainers, and to further their various works, and as a consequence the country was forced to the brink of economic ruin. Their regime, but not all of their power, came to an end with the conquest of Egypt by the Ottoman Sultan, Selim I.

Unfortunately for Egypt the Sultan placed a pasha or governor, with a guard of janizaries, at the head of the administration but otherwise made few changes. The 12 districts into which the country was divided were left in the hands of their Mameluke officials. The result was a weak and corrupt government even after the succeeding Sultan had created two chambers, called the greater and lesser divan, to aid and advise the pasha. Both the army and ecclesiastical authorities were represented in these bodies, but their deliberations did not add to the tranquillity of the affairs of state. The arts and crafts suffered under the rule of Selim I, as he is reported to have taken back to Turkey with him so many masters of crafts not practiced there that more than 50 manual arts passed out of existence in Egypt.

Land was placed in four categories for tax purposes. They consisted of the Sultan's domain, the estates of the Mameluke lords, that for the maintenance of the army, and that settled on the various religious orders. In each case a maximum return was exacted. In succeeding years there were quarrels between the various factions, rebellions among the Mameluke chieftains, mutinies in the army, and other disturbing events. Constant changes in the government, with the pashas losing in power and the beys, or heads of the districts, gaining in influence and authority, did not help matters. Extortion was practiced on every hand, and the country suffered from famine and pestilence.

The beys had completely superseded the pasha by the eighteenth century, and two of the principal offices and the men who filled them became a dual head of the state. Conflict between the incumbents of these offices led to efforts on the part of each to gain supreme control. This culminated

in the final ascendancy in 1750 of one 'Ali Bey. The latter not only gained control of Egypt but declared himself independent of the Ottoman Government, subjugated most of the Arabian Peninsula, named one of his cousins as the ruler of Mecca, and set out to take Syria from Turkey. Treachery on the part of some of his subordinates interfered with the success of his plans. His forces were defeated and he was captured and returned to Cairo, where he died a few days later. Following his death Egypt once more became a Turkish dependency and was ruled by pashas, with a brief interlude when two beys assumed control, until 1791 when the country was swept by a terrible plague and the governor and most of his family perished. In this crisis the Sultan reinstated two of the beys who had deserted 'Ali Bey at the time of his defeat in Syria, and their dual government was still functioning when Napoleon invaded Egypt.

Napoleon's expedition to Egypt in 1798 was ostensibly for the purpose of suppressing the Mamelukes and restoring the authority of the Ottoman Government, but actually it was a part of his plan for world domination. His capture of Alexandria and victory over the forces of the Mameluke beys near the pyramids at Gizeh led to a temporary subjugation of the country. The French were forced out of Egypt, however, in 1801 by the combined efforts of the Turks and the British. Shortly after the French evacuation trouble again developed as a result of the Turkish attempt to destroy the power of the Mamelukes. This led to a disastrous struggle between the two groups and the ultimate revolt of the Albanian soldiers in the service of the Turkish governor. Growing out of this revolt was the break between the Albanians and the Turks that culminated in the ousting of the latter and the rise of Mohammed Ali, the Albanian soldier.

### MOHAMMED ALI

Chosen to be pasha by the body of Moslem functionaries who interpret the Koran, the ulema, Mohammed Ali after many difficulties and considerable conflict, including the defeat of a British force at Alexandria, was confirmed in that office by the Ottoman Government. It was necessary for him, however, to establish his authority, and this was accomplished by much bloodshed and the massacre of Mameluke beys throughout Egypt. When he had become undisputed master, he acknowledged the suzerainty of the Sultan and proceeded to right the affairs of the country. He established order so that the Nile and the highways were safe for all, Christian and Moslem alike. Genuine efforts were made to promote education, especially the study of medicine, and religious and social tolerance. The activities of the Bedawins were directed into peaceful channels. A large

system of irrigation works, canals, and barrages was established in the Delta, and the intensive cultivation of cotton was introduced. By a combination of excavating and the use of existing canals he created the Mahmudieh Canal and provided a safe channel between Alexandria and the Nile. Development of the port of Alexandria was started, and as a result of favors granted to European merchants it again became important. The discovery of the passage from Europe to India by the Cape of Good Hope, at the close of the fifteenth century, had greatly decreased Egyptian commerce, but as a result of Mohammed Ali's efforts there was resumption of the overland transit of goods to India by way of Egypt. Manufacturing was stimulated, although the fact that the chief products became a monopoly of Mohammed Ali was of little help to the masses, and the ground work was laid for an economic renaissance.

Arabia was brought under Mohhamed Ali's domination as a result of his campaigns against the Wahhabis. Nubia and a part of the Sudan were then annexed. The army and navy were reorganized under French instructors and were modernized along European lines. Troops sent to aid the Turks in their war against the insurgent Greeks occupied Crete and various points on the Morea, a peninsula in southern Greece. The naval superiority of the Egyptian fleet wrested command of the sea from the Greeks, and Mohammed Ali's aid to the Sultan would have been decisive had it not been for the intervention of European powers. The Egyptian armada and a Turkish squadron were wiped out at the battle of Navarino by a combined fleet of British, French, and Russian ships. Later a British fleet appearing at Alexandria and French troops in Morea forced the withdrawal of the Egyptians.

Following this misadventure Mohammed Ali revolted against the Sultan. For a period of 10 years (1831-41) the situation occupied the attention of the diplomatic world. Britain was concerned over the outcome of the struggle because of its bearing on the routes to India by the Isthmus of Suez and the Euphrates Valley, and Russia was interested in the fate of Constantinople and the future of Greece. Egyptian troops under Ibrahim, son of Mohammed Ali, were so successful that the European powers stepped in and halted hostilities by arranging that the Sultan turn over Syria, Damascus, Aleppo, Itcheli, and the district of Adana to Mohammed Ali. Subsequently the Sultan attempted to retrieve some of this lost territory, but his troops were again defeated. Before the news of the rout had reached Constantinople the Sultan died and the whole of the Ottoman Empire was Mohammed Ali's for the taking. This outcome had been expected by the European powers, and

they promptly intervened. The result was the restricting of the pasha's authority to Egypt, the Sudan, the Sinai Peninsula, and certain parts of the Arabian Red Sea coast. Rule over Egypt was made hereditary in the line of Mohammed Ali, a provision that has been observed to the present time, but the pasha was no longer to be a figure of importance in European politics. The size of his army was sharply curtailed, and he was forbidden to maintain a fleet.

Conditions in Egypt at this time were serious. An epidemic swept the cattle of the country in 1842, and many were lost. The same year witnessed a destructive flood in the Nile, and in 1843 there was a plague of locusts. Whole villages were depopulated as a result. Taxes were heavy and the lot of the fellaheen was not improved when many were forced to contribute their labor to great public works. Under the weight of advancing years Mohammed Ali's mind failed, and his son Ibrahim became pasha. The latter lived only a few months and was followed by his nephew Abbas, a grandson of the old pasha. Mohammed Ali died in the summer of 1849 at the age of 80.

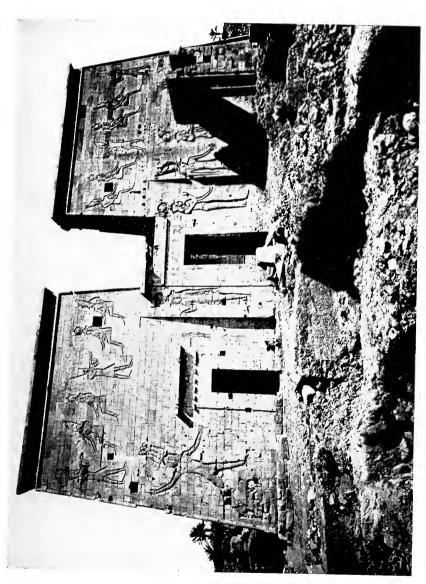
Abbas was opposed to European ways and lived in seclusion. He put an end to the system of commercial monopolies that had flourished for so long and, at the instigation of the English, started the railroad from Alexandria to Cairo. He had reigned a few months less than 6 years when he was murdered by two of his slaves. His uncle, Said Pasha, succeeded him. Said had been the favorite son of Mohammed Ali, but he was not a strong character and was greatly influenced by the French. Against the opposition of the British a concession for the construction of a Suez Canal was granted to Ferdinand de Lesseps. Partially to compensate for this the British were granted concessions for a telegraphic service and for the establishment of the Bank of Egypt. To Said belongs the questionable honor of initiating the public debt. He died in 1863, and his nephew Ismail, a son of Ibrahim and another grandson of Mohammed Ali, became pasha.

### FOREIGN INTERVENTION IN EGYPT

Ismail reigned for 16 years. In the earlier part of his regime he introduced a number of reforms and was believed to be bringing a new era to Egypt, but his extravagant ways finally led to bankruptcy and foreign intervention in the internal affairs of the country. Probably the most important single event in his reign was the completion and opening of the Suez Canal. He did have the customs service overhauled by English experts; had railways, telegraph lines, harbor works, lighthouses, and

the breakwater at Alexandria constructed by the best European contractors; and provided some support for education. He extended Egypt's holdings in the Sudan and waged an unsuccessful war against Abyssinia. By doubling his tribute to the Sultan he gained the right of primogeniture for his family, received the title of khedive, and finally gained recognition as a virtually independent sovereign. All this required so much money that the resources of the country would no longer support the needs of the administration, and Ismail was unable to borrow more funds in Europe because of previous failures to honor his obligations. To obtain money it was necessary for him to sell thousands of shares in the Suez Canal to the British Government. This precipitated a series of international investigations that culminated in the establishment of Mixed Tribunals that were international courts of justice, international control over revenues, internationalization of the railways and the port of Alexandria, and international control over the extensive landed property of the khedive. Growing out of this was the formation of a constitutional ministry with an Egyptian at the head of the cabinet, an English minister of finance, and a French minister of public works. Irked by this arrangement, Ismail plotted and carried out a military riot in Cairo and seized direct control of the government. The British and the French protested to the Sultan with the result that Ismail was dismissed and his eldest son, Tewfik, was proclaimed khedive.

Dual control over the country, a British official to supervise revenues and a French official to control expenditures, was resumed under Tewfik. The ruling classes, antagonized by curtailment of their former privileges, instigated uprisings against "the foreign usurpers." The Egyptian Government was too weak to suppress these activities and made concession after concession to the agitators. Conditions finally became so critical that British and French fleets were sent to Alexandria in the spring of 1882. Following a massacre by rioting Arabs in the city the forts were bombarded by the British. Leaders of the revolt prepared to resist further interference, and the Sultan declined a request to suppress them. The British then decided to use armed force and invited the French to cooperate. The latter did not accept, and a similar proposal to Italy was also refused. Undeterred, the British acted alone and landed an army. They defeated the insurgent forces and took over the problem of reorganizing the country. Their primary purpose was to restore order, bring about some measure of prosperity and, if possible, lay the ground work for capable self-government in the future. There were many difficulties, and in spite of some success and generally



PYLON OF THE TEMPLE OF ISIS AT PHILAE



PYLON OF THE TEMPLE OF HORUS AT EDFU
The large figure at the left is that of Auletes, Ptolemy XIII, the father of Cleopatra.



### 1, CARVINGS ON WALL IN THE TEMPLE OF KHONSU AT KARNAK

Started by Rameses III, the Temple of Khonsu in its completed form represented the combined efforts of several Pharaohs.

# 2. PORTION OF THE PYLON OF THE TEMPLE OF HATHOR AT DENDRA

Figure at the left represents Cleopatra, that at the right, Julius Caesar. The small figure between is their son Caeserion.



PROPYLON OR GATE OF EUERGETES I, PTOLEMY III, AT KARNAK

improved conditions there was a rising tide of anti-British feeling and the growth of a strong Nationalist party. This reached a crisis in 1892 when Tewfik, who had maintained satisfactory relations with the British, died suddenly and was succeeded by his son Abbas.

Abbas II took immediate steps to free his government from foreign domination. He dismissed the prime minister and appointed a new one who was not acceptable to the British. He also encouraged anti-British and Nationalistic agitation. This brought remonstrances and strong pressure on his government, and a compromise was reached. The former prime minister was finally reinstated, and things progressed in a more satisfactory manner under joint British-Egyptian rule. The local administration in the provinces received much needed reform. Irrigation projects were initiated and completed, and land values increased accordingly. European capital was invested in the country, and the fellaheen began to enjoy a degree of prosperity unknown for centuries. The Sudanese provinces were recovered, and the administration of the Sudan was organized under a governor general recommended by the British and appointed by the khedive. An agreement was reached between France and Great Britain whereby the spheres of influence of both were delimited. This served in part to quiet international unrest over the British occupation of part of the Sultan's domain, but complete accord was not attained until 1904, when a declaration signed by France and Great Britain recognized the dominant position of the French in Morocco and the British in Egypt. Similar declarations by Italy, Austria, and Germany followed, and Britain thus obtained virtual acknowledgment of a protectorate over Egypt. Attached to the Anglo-French agreement was a decree of the khedive providing for financial independence for Egypt. This was approved by the European powers and became effective on January 1, 1905. Under its provisions Egypt was once more in control of her own revenues, and the Government was free to take advantage of the country's financial prosperity as long as the interest on the public debt was punctually paid. No provisions were made, however, in the matter of the extraterritoriality enjoyed by Europeans in criminal cases, and this continued to be a source of trouble.

The period from 1905 to the outbreak of the first World War was marked by various incidents. Turkish intrigues, Nationalist activities, and an increase of Moslem religious fervor created unrest among the masses. Difficulties between Turkey and Egypt over the Sinai Peninsula were settled only after the Sultan submitted to a virtual ultimatum from Great Britain and agreed to the frontier established by a joint Turco-Egyptian boundary commission. Italy's declaration of war against Turkey and invasion of Tripolitania in 1911 created a tense situation and the Sultan

had to be prevented from using Egyptian forces against the Italians. There was strong feeling against the aggressors, however, among the Egyptian Moslems. A program of administrative reform was actively pursued, and there was some constitutional progress. A new organic law provided for a single administrative body composed of 66 members elected by indirect suffrage and 17 members nominated by the government from minorities that otherwise would have had no representation. The president and one vice president were appointed by the Government and a second vice president was chosen by the assembly. The body was mainly deliberative and consultative, but it could veto increases in direct taxation, initiate some measures of its own, and voice opinions on general administrative business. Once established, this assembly was far from satisfactory as it devoted much of its time to useless disputes and pettifogging. Furthermore, the khedive was antagonistic to the scheme and fostered various plots to undermine its effectiveness.

The outbreak of World War I probably saved the British agent and consul general from having to take some drastic action to alleviate the situation. Abbas II was in Constantinople at the time and did not return to Egypt. Because he was involved with Britain's enemies, he was deposed the day after Britain declared an end to Turkish suzerainty and the establishment of her own protectorate over Egypt. Prince Husein Kamel, an uncle of Abbas, accepted the succession and was named Sultan of Egypt. His own son declined the position of heir-apparent, and Prince Fouad, the sixth son of Ismail, was designated. On the death of Husein in 1917 Fouad became Sultan and, as previously noted, became King Fouad I when Egypt was declared an independent sovereign state in 1922.

### THE SUEZ CANAL

The approximately 100-miles-long artificial waterway across the Isthmus of Suez connecting the Red and Mediterranean Seas furnishes a link between two continents that has been of commercial value to the whole world. By means of this canal oceangoing vessels have been able to traverse the land bridge between Asia and Africa and thus sail from Europe to the Orient without circumnavigating Africa, a saving of thousands of miles and weeks of time. It unquestionably has been an international asset and as such has been carefully watched by all nations.

The need for such a waterway was long recognized. As a matter of fact, plans for the "sailing of ships across the desert" may be said to date from almost the dawn of history. The first actual canal making possible the shipment of goods from the Mediterranean to the Red Sea

seems to have been constructed during the twelfth dynasty, in the nineteenth century B. C. It connected the then eastern or Pelusiac branch of the Nile with the Suez region and the Gulf of Suez by way of the fertile Wadi Tumilat and the Bitter Lakes. This canal was still operating under Seti I of the nineteenth dynasty, around 1300 B. C., but by the time of Rameses III of the twentieth dynasty, 1198 to 1167 B. C., it seems to have fallen into disuse, probably had filled with silt, because the latter Pharaoh brought cargoes from ships of his Red Sea fleet overland by donkey caravan to Coptos and thence down the Nile to the royal city in the eastern Delta. Portions of the old channel may still be traced, however, in the Wadi Tumilat. It was some 600 years before the project was revived, and Necho, the twenty-sixth dynasty Pharaoh, failed in his attempt to open a new channel between the Nile and the Red Sea. This is the waterway that was completed by Darius, the Persian, about 80 years later and which contributed so much to the flourishing commerce of that period in the Delta. Darius' canal did not actually connect with the waters of the Red Sea, and it was necessary to transfer merchandise from Mediterranean ships to those from the south. Eventually Philadelphus, the second of the Ptolemies, constructed the connecting link, and at about 285 B. C. the waters of the canal mingled with those of the Red Sea.

By the time of Cleopatra, 44 to 30 B. C., the Pelusiac branch of the Nile had become so silted and shallow that ships from the Mediterranean were no longer able to use it. Some repair work was done on the canal between Bubastis and the Red Sea during the Roman period, and the Emperor Trajan has been credited with constructing a new canal between Bubastis and Babylon (old Cairo), but the latter probably was the work of the seventh-century Arab conqueror of Egypt. It was used for over a century after the Moslem occupation and then was closed, at about A. D. 770, by orders of the caliph in an effort to prevent supplies being sent to his enemies in Arabia. The Sultan Hakim is purported to have again made the canal navigable in A. D. 1000, although it did not remain open long. Portions of it continued to be filled with silt from the annual Nile floods until the canal was finally ordered closed by Mohammed Ali. Even then, however, some sections remained in use and ultimately were incorporated in the French fresh-water canal leading from Cairo to Suez.

Proposals for a canal directly across the Isthmus of Suez, one not dependent on any portion of the Nile, were made sporadically from the eighth century onward. Harun al-Rashid is said to have advanced the idea but was dissuaded from taking any action on the grounds that it

would be dangerous to open the Arabian coast to the Byzantine navy. The Venetians endeavored to interest the Egyptians in such a project in the early part of the sixteenth century. The Turks did not approve, however, and the matter was dropped. 'Ali Bey, during the period when he was in control of Egypt, regarded the idea favorably when it was again brought forward by Louis XIV of France. While Napoleon was in Egypt some 28 years later he ordered a survey for such a canal. The proposal languished after the defeat and evacuation of the French forces until 1846, when it was revived by the organization of a society for a study of the Isthmus and a canal route. The report of this society's commission reverted to older concepts and favored a canal from Alexandria to Suez by way of Cairo. No definite action was taken, however, and the matter was in abeyance until 1854, when Ferdinand de Lesseps came to the fore and obtained his concession from Said Pasha. The concession provided for the organization of a Compagnie Universelle du Canal Maritime de Suez for the express purpose of constructing a waterway across the Isthmus.

De Lesseps and his two French engineers chose a route from the Bay of Pelusium, the mouth of the old Pelusiac branch of the Nile, along the eastern edge of Lake Menzala, through the depression that is now Lake Timsah and the Bitter Lakes to Suez. The following year an international commission recommended a change in the plans whereby the northern section of the canal would pass through Lake Menzala instead of skirting its eastern border. The remainder of the line, together with the decision that there would be no locks, was approved. The latter plan was embodied in a second and more comprehensive concession issued in 1856. Included in this new concession were stipulations that the company should also construct a fresh-water canal from the Nile near Cairo to Lake Timsah and branches to Suez and Pelusium running parallel to the main maritime canal. The concession was to last for 99 years from the date of the opening of the canal from the Mediterranean to the Red Sea. When it expired, the canal was to revert to the Egyptian Government unless other arrangements had been agreed upon in the meantime. Confirmation of the concession by the Sultan of Turkey was required, and this was obtained only after considerable diplomatic opposition on the part of the British who felt that the project represented French interference in the East and that such a canal would be inimical to British maritime supremacy.

Subscription lists for stock in the company were opened in 1858 and most of the shares were applied for within a short time. France and Turkey were the main subscribers with about 21 percent of the issue being retained in Egypt. Actual construction was started in April 1859 near the

site of Port Said. The work went slowly, but within 3 years the freshwater canal between the Nile and Lake Timsah was completed and a pioneer channel had been dug between that lake and the Mediterranean. The fresh-water canal was continued to Suez the following year. All this work was done by native labor under the provision of the second concession which stipulated that four-fifths of the workmen employed must be Egyptians. Said Pasha supplied the required manpower by means of the corvée, a system of enforced labor, and despite the fact that the men were housed, fed, and paid better than prevailing wages by the company, there was considerable disapproval of the system. When Ismail became khedive he soon reached the conclusion that this arrangement was not in the best interests of the country and sent his foreign minister to lay the matter before the Sultan at Constantinople and to request that the company be required to make certain changes in the method of procedure. The Sultan approved the requests of the Egyptian Government, but the company protested, and it was necessary to carry the dispute to Napoleon III, the Emperor of France, for arbitration. His decision was that forced labor should be abolished, that certain sections of the fresh-water canal between Lake Timsah and Suez and the property ceded to the company by Said Pasha should be turned over to the Egyptian Government. The company was to be indemnified in the amount of 84 million francs for relinquishing these items and was permitted to retain sufficient land along the canal for construction purposes and to provide space for tool sheds, shops, and other necessary buildings. The loss of forced labor led to the introduction of mechanical digging equipment and modern engineering methods and this, in no small measure, was responsible for the ultimate success of the project. The company was in financial difficulties from time to time and was forced to make various compromises with the Egyptians but managed to carry the work to completion, and in November 1869 the canal was opened to regular traffic.

The canal originally had a depth of approximately 26 feet (8 m.) and a width of 72 feet (22 m.). It had only been in use a short time, however, when it became apparent that it would have to be both widened and deepened. Efforts toward that end were started in 1876. The report of an international commission in 1885 recommended more extensive work, and a more or less continuous program of improvement has been under way from that time to the present. Although little could be done during the period of World War I, much was accomplished in the interval beginning in 1921 and lasting until the outbreak of current hostilities. The channel was widened, deepened, and straightened until it is now approximately 198 feet (60 m.) wide and averages  $37\frac{1}{2}$  feet (11 m.) in depth. This en-

largement reduced the time required for passage by more than one half. Jetties and other works were built and the canal was lined with high-powered lights so that ships could proceed by night as safely as by day. The erection of a "model" city with apartments and dwellings suitable for all classes of the canal company employees, with stores, schools, churches, mosques, hospitals, and extensive avenues and boulevards was a part of the recent program. This city is at the Mediterranean end of the canal on the eastern or Asiatic side opposite Port Said. It was officially dedicated by King Fouad I and in honor of his late majesty is called Port Fouad.

In the closing days of 1869, following the official opening of the canal, 68 vessels made the passage through it. The first full year of operation, 1870, saw 500 ships use its waters, and from that time onward there was a continual increase in traffic until more than 6,000 sailed through it in 1938. In the months of 1939 preceding the start of World War II over 5,000 had used the canal. Beginning in September of that year there was a noticeable drop and since that time the flow has been disrupted by the trend of hostilities. During the first few years of its operation the tolls received were not sufficient to meet the running expenses of the company, and it was on the verge of bankruptcy. Efforts to obtain additional loans were not successful, and the situation was critical until relieved by a rapid increase in revenues. The company has since been in sound financial condition. As the number of ships using the canal has increased, the toll rates have been lowered, making it advantageous for more vessels to follow that route. The shares acquired by Great Britain from the Khedive Ismail in 1875 are now valued at approximately 25 times their original cost, probably are worth much more, and the interest and dividends received by the British treasury are said to represent 15 times the amount of the original investment. None of the shares were held by the French Government, but it profited in no small degree from the taxes paid by the canal company and private French shareholders. Contrary to a widespread impression the Suez Canal is neither entirely nor mainly controlled by Great Britain. It is operated by a board of management composed of 19 French directors, 10 British directors, 2 Egyptian directors, and 1 Netherlands director. Of the 10 British directors, 3 represent the Government and 7 the shipping and commercial interests of Great Britain.

The Suez Canal Convention signed at Constantinople in 1888 by Great Britain, France, Italy, Germany, Austria, Spain, the Netherlands, Turkey, and Russia provided that the canal should always be free and open in time of war as in time of peace to all vessels, either commercial or naval, regardless of the flag they flew. In 1914 the defense and direction of

the canal were turned over to British military authorities, and it was guarded by the armies and navies of Great Britain and France. Throughout World War I it was open to ships of the Allied powers and those of neutral nations. The neutrality of the canal was maintained after the outbreak of World War II, but its use was more or less limited by the blockades set up in the Mediterranean and the Gulf of Aden. In spite of the fact that the Italians for a time were in control of the western shores of the Gulf of Aden and the Strait of Bab el Mandeb, they were not able to prevent some British shipping from slipping through to the Red Sea and on to Suez. The British conquest of Italian East Africa removed all interference, however, and also the restrictions against vessels of the United States sailing into those waters. This resulted in a marked increase of traffic through the Red Sea and the canal. In January 1941 German bombers sank several ships in the canal, and for a time it was necessary to transfer cargoes to trains and haul the merchandise across the Isthmus by the railroad that parallels the canal from Suez to Port Said. The British and other United Nations forces have been able to keep it open most of the time, however, and the bulk of the supplies for the armies in Egypt and the Near East has been shipped that way. In fact the British control of the eastern Mediterranean was largely made possible by the canal, and that is one of the main reasons that the United Nations have been so determined to prevent its falling into Axis hands.

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